



NCSBE Exceptional Children Accountability and Tracking System Service Level Agreement for Public Consulting Group Hosting and Support Services

V5.2

November 17, 2016
Updated July 19, 2019

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

Distribution

Note: HC = Hard Copy
 SC == Soft Copy

Recipient Name	Recipient Organization	Distribution Method
NCSBE – State		
Michael Nicolaides	NCSBE-CIO	HC/SC
Traci Tillis	IT Manager	HC/SC
PCG - Service Provider		
Ladd Van Devender	PCG-Manager	HC/SC
Amy Smith	PCG-Manager	HC/SC

SLA Approvers

Group	Approver Name	Approver Signature	Approval Date	Approval Title
NCSBE - State				
	Michael Nicolaides			CIO
	Traci Tillis			IT Manager
PCG - Service Provider				
	Amy Smith			Manager
	Ladd Van Devender			Manager

1 Introduction

This Service Level Agreement ("SLA") sets forth the framework for Public Consulting Group, Inc.'s ("PCG" or "Service Provider") provision of Hosting, System Maintenance and Support, and product Support Services to the North Carolina State Board of Education ("NCSBE" or "State") (PCG and NCSBE are collectively referred to as the "Parties") for Exceptional Children Accountability Tracking System (ECATS), which will be located at a PCG facility or a 3rd party facility selected by PCG and describes the responsibilities of the Parties with respect to the provision and receipt of such Hosting Services. This SLA shall be deemed an Attachment to that certain agreement by and between PCG and NCSBE, dated February_, 2016, for the provision of the Special Education, Multi-Tiered System of Supports (MTSS), Service Documentation, and ECATS ODS modules of ECATS, by PCG to NCSBE (the "Agreement").

This document is organized into the following 4 sections:

- Section 1 - Introduction
- Section 2 - Hosting Services
- Section 3 - System Maintenance and System Support Services
- Section 4- ECATS Application Support Services

1.1 Service Level Agreement

This SLA sets forth provisions for Service Provider to provide hosting services to the State and outlines the Roles and Responsibilities of each party. This SLA shall define and provide appropriate controls on the rights and responsibilities of each of the Parties.

The objectives of this SLA are as follows:

- Define the types of services provided by Service Provider to the State
 - Define the levels of service provided by Service Provider to the State
 - Define how the levels of service provided to the State will be measured
 - Define the Roles and Responsibilities in the provision of the services to the State
 - Define the mechanisms specifying how incidents reported to Service Provider will be responded to and escalated if they are not resolved according to the SLA
 - Define how the SLA will be maintained
-
- Availability
 - Remedies
 - Performance metrics

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

- Security
- Configuration Management/Change control

1.2 Service Level Agreement Changes

It is mutually understood and agreed that no alteration of the terms of this SLA shall be valid unless made in writing using the SLA Scope Change Request Form set forth in Appendix B, which is attached hereto and incorporated herein by reference. No oral understanding or contracts are incorporated herein and no alteration or variations of the terms hereof shall be binding on either party unless made in writing and signed by both Parties. Approved changes to this SLA will be effective as of date of the last executing signature to the applicable SLA Scope Change Request Form. Each fully executed SLA Scope Change Request form shall be deemed an amendment to the SLA (each a "SLA Amendment"). All such amendments serve to modify this SLA and in the event of any conflict between the terms of this SLA and a SLA Amendment, the terms of the SLA Amendment will take govern.

1.3 Period of Agreement

This SLA shall become effective upon the effective date of the Amendment 4 and shall continue in full force and effect for the term of the Agreement, including any extensions, unless otherwise earlier terminated by mutual agreement of the Parties.

1.4 Review Procedure

This SLA will be reviewed annually by the Parties during each calendar year it is in effect. The time, place, and date of the review shall be as mutually agreed upon by the Parties. The review will cover services provided, service levels and procedures. Any changes to this SLA resulting from such review must be approved by both Parties and reduced to writing in the form of an SLA Amendment as described in Section 1.2 above.

1.5 Definitions

The following definitions shall apply to this SLA. All capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Agreement:

- a) "**Disaster**" shall have the meaning ascribed to it in Section 2.10 of this SLA.
- b) "**Error**" shall mean a reproducible failure of licensed product to operate in accordance with its intended functionality, despite the proper installation and use of licensed product in a proper operating environment and on hardware

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

and system software sufficient to meet then-current minimum requirements, which are subject to change as new versions are released. User mistakes are not errors within the meaning of these policies. Errors may be due to problems in licensed product, the documentation, or both.

- c) **"Emergency Unavailability"** means those times when material components of the Hosting Services are not available resulting from third party communication failure, a third party software interoperability issue that is not caused by or could not have been reasonably mitigated by PCG utilizing commercially reasonable efforts, or a hardware failure that is the result of an error or defect on the part of the hardware manufacturer and that requires repair by a person with specialized knowledge before the equipment can be put back into operation, or force majeure events.
- d) **"Hosting Services"** means the hosting services described in Section 2.2 of this SLA.
- e) **"ECATS Annual Hosting Fee"** means the amount paid annually for hosting and equipment costs on the Special Education, MTSS, Service Documentation, and ECATS ODS modules within ECATS.
- f) **"ECATS Monthly Hosting Fee"** means the ECATS Annual Hosting Fee divided by twelve (12).
- g) **"Designated Representatives"** means the State's support and management staff, who shall be authorized to contact PCG for the purpose of obtaining Support Services. This includes employees of LEAs and Charter Schools.
- h) **"Maintenance Services"** means the maintenance services to be provided by PCG pursuant to this Schedule and the Agreement.
- i) **"State Normal Business Hours"** means the hours between 7:30 a.m. and 5:30 p.m. in the Eastern United States time zone.
- j) **"Support Services"** means support services to be provided by PCG pursuant to this Contract and to Section 4 of this SLA.
- k) **"Users"** any person with a valid user ID and online access to ECATS via the web interface.
- l) **"PK-13 Educational Institutions"** the State and all current and future North Carolina Local Education Agencies (LEAs), Charter Schools, Regional Schools, Educational Services for the Deaf and Blind Schools (ESDB), and other public schools and entities under their purview as the need may arise (hereinafter referred to individually as **"PK-13 Educational Institution** or

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

collectively as “**PK-13 Educational Institutions**”).

- m) “**Supported Technology**” Functionality that is provided between or among products, programs, devices, modes, or accessories such that the functionality can be used without need for significant modification within the products, programs, devices, modes, or accessories. Ex. If product X can be used with a program, device, mode, or accessory Y without the need for significant modification of either X or Y, then X supports Y. If product X cannot be used with a program, device, mode, or accessory Z without substantial modification of X or Z, then X does not support Z.

1.6 Roles and Responsibilities

The table set forth below describes the Roles and Responsibilities of PCG and the State at a high level to provide the Parties with an understanding of the responsible resources that each party has initially identified to manage their responsibilities for areas addressed by this SLA. This table lists only State personnel that can make decisions or delegate work associated with the ECATS environments. Any work or trouble shooting the State needs PCG to perform will be documented through the Help Desk system. The State will not contact PCG personnel directly unless there is an emergency situation or have been instructed to do so by the appropriate management staff.

Roles/Responsibilities	Service Provider	State
Provide Executive oversight		Michael Nicolaidis
Provide SLA Management, monitoring, review change proposals and provide overall customer project management		Traci Tillis
Provide, manage and operate hardware, OS, and file system services	PCG	
Manage and employ system applications and databases	PCG	
Provide Data backup, restore, and disaster assistance	PCG	
Oversee Change Management process	PCG	Traci Tillis
Adhere to statewide security policy and procedures	PCG	TBD
Maintain access controls to hardware/software suite	PCG	
Provide monthly billing and negotiate rate adjustments to account for Remedies	PCG	Traci Tillis
Provide problem escalation and resolution	PCG	Traci Tillis
Coordinate OS Patches	PCG	Traci Tillis
Coordinate Security Patches	PCG	Traci Tillis
Provide performance monitoring and associated metrics	PCG	Traci Tillis

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

Provide System Monitoring and associated metrics	PCG	Traci Tillis
Provide Application Monitoring and associated metrics	PCG	Traci Tillis
Database and database administration	PCG	
Manage access to ECATS ODS	PCG	Traci Tillis
Coordinate non routine outages or down time	PCG	Traci Tillis

2 Hosting Services

This section refers to the hosting services to be provided by PCG.

2.1 Hosting Site

The Hosting Site shall be consistent with the following:

PCG will comply with all applicable state statutes, including N.C.G.S. 1438-1375 through 1379. PCG must utilize a Third-Party Assessment Agency/Organization to perform the assessment of PCG's security controls to determine the extent to which security controls are implemented correctly, operate as intended, and are in compliance with the Statewide Information Security Manual. Assessments must be conducted using industry best practice certification, e.g. SOC 2 Type 2 or NIST Risk Management Framework (RMF). PCG shall provide the assessment reports required by this section within 1 year of the assessment completion date. Contracts with vendors providing offsite hosting or cloud services must require the vendor to provide the State with an annual risk assessment report to establish compliance with N.C.G.S. 1436-1342. The State shall ensure that its security staff is available for consultation during these processes. Identified gaps between required Security Control Baselines and PCG's implementation as documented in the Security Assessment Report shall be tracked by PCG for mitigation in a Plan of Action and Milestones (POA&M) document. PCG will remediate within an agreed-upon timeline any material weaknesses in PCG's security controls identified in such report that are identified as a reason for the auditor to issue such report as "qualified" or "adverse", and PCG will use commercially reasonable efforts to remediate any other material weaknesses identified in such report. The proposed production system must be securely hosted and accessed in a data center that meets and conforms to SSAE16 Type II certification. PCG's hosted site shall remain operational 24 x 7 x 365 during the term of the ECATS Service contract, subject to the terms of this SLA. The data center may be at PCG's site(s) or can be subcontracted. This must include the use of auditable procedures for system operations, change control, capacity planning, performance management, problem management, backup (including off-site storage), and fail-safe and disaster recovery. The systems environment must be scalable to accommodate future systems expansion as specifically described in Section 2.6 below and must reside in the

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

continental United States of America. The State understands that the system may be accessed by employees located in PCG's offices in Canada. PCG's main hosting site data is routinely replicated to a backup location in order to ensure 24 our RTO; excluding PCG's standard data replication procedures, nonlocal backups will not be allowed without written consent from the State.

2.2 Hosting Services

Hosting Services shall consist of the following:

- a) Provision and housing of ECATS computer hardware (i.e. vendor owns and maintains hardware NOT the State or PK-13 Educational Institutions) within a designated physical facility including conditioned electrical power and multiple access paths to the Internet;
- b) Provision of secure access via the Internet, using a web browser and web services, to the ECATS by End Users; shall support all major web browsers, including but not limited to, IE, Chrome, Safari, Firefox, at current version and two versions prior; shall support all major mobile web browsers at current version and two versions prior;
- c) Installation, configuration, system administration, and maintenance services for the facilities, equipment, and software required to operate and ensure access to the ECATS modules in a manner consistent with this SLA. PCG or its approved subcontractor also shall perform standard database administration functions to maintain efficient and secure operation of the hosted databases;
- d) Provision and support of a minimum of three system instances- production, training and a testable (QA) non-production instance.

PCG may use third parties to provide physical infrastructure for its data centers, Internet connectivity, energy utilities, security services, fire prevention services, environmental services such as HVAC, and third parties for maintenance and support on hardware, all of which may be part of Hosting Services. Where PCG is intending to make a change to the Hosting Services that will have a direct and material impact on the State, or, where the change would allow a third party direct access to the State's Confidential Information or the State Data, PCG will provide prior written notice to the State. PCG may be required to demonstrate the third party is duly authorized, licensed and or capable of performing the task or service requested. In either case, PCG shall remain solely responsible for providing the Hosting Services described herein, according to the Service Levels described in this SLA.

2.3 Service Levels

PCG or its approved subcontractor shall provide the Hosting Services to enable the State to use Special Education, MTSS, Service Documentation, and ECATS ODS modules within ECATS as described in the Agreement. The Service Levels that PCG or its approved subcontractor shall meet are set forth below, together with remedies for the failure to meet them. A failure caused by a hosting entity chosen by PCG, including an approved subcontractor, shall be treated as a failure caused by PCG.

- a) The following terms shall be used in defining and measuring compliance with Service Levels:
 - i) **“Availability”** or **“Available”** means the total time in a calendar month when the Special Education, MTSS, Service Documentation, and ECATS ODS modules within ECATS are accessible via an Internet connection and performing the major and critical functions as specified in the Agreement. The hosted environment and access to those modules shall be unavailable during certain scheduled downtime periods for the purpose of conducting maintenance and upgrades to them. The hosted environment shall be deemed available, even if it is not accessible by the State, if the inaccessibility is due to the State's network infrastructure, its connection to the Internet, when a user's computer or network infrastructure impairs or prevents access, an Internet failure outside the control of PCG or its approved subcontractor, or a force majeure event.
 - ii) **“Uptime”** means the percentage of total time in a calendar month that the hosted environment is either Available or in Scheduled Downtime. Uptime is calculated as the sum of Available time plus Scheduled Downtime divided by total time, expressed as a percentage.
 - iii) **“Unscheduled Downtime”** is 100% minus Uptime, both expressed as percentages. For example, if the system Uptime was 98%, the Unscheduled Downtime is 2% (100% - 98%). Unscheduled Downtime shall be determined to start as of the time when PCG becomes aware of the outage, either through notification by the State, a user or from its own internal monitoring, whichever occurs first. Emergency maintenance used to correct defects in PCG or PCG's approved hosting subcontractor's infrastructure shall be counted as Unscheduled Downtime and applied against the SLA. Where emergency maintenance is required for non-PCG products the emergency maintenance will not be included in the availability calculation denoting Unscheduled Downtime.
 - iv) **“Scheduled Downtime”** is defined as time planned and agreed upon

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

in advance for reasons including scheduled maintenance, system updates and patches, planned system outages and system upgrades with notification, and Excluded Events. “Excluded Events” shall mean any outage that exists as a result of any failure outside of PCG’s or PCG’s approved subcontractor’s physical environment or control; any event outside PCG or PCG’s approved subcontractor’s hosting center; internet outages outside of PCG or PCG’s approved subcontractor’s hosting centers; client side network outages; and Force Majeure conditions established in RFP 40-IT00114-15 VII. Department of Information Technology SAAS Terms and Conditions. The State acknowledges that the ECATS System will have planned system outages scheduled monthly on the 3rd Saturday of the month. The maintenance schedule will be provided yearly and changes to the schedule will be communicated to the State no less than 24 clock hours in advance of the scheduled downtime.

- v) **“Downtime”** shall mean Scheduled Downtime and Unscheduled Downtime, collectively.
 - vi) **“System Response Time”** means the amount of time elapsed between the point at which an http/https request reaches the Hosting Site and the beginning of the transmission of a response back to the originating station. PCG *or* its approved subcontractor shall continually monitor the performance of the hosted environment and will use commercially reasonable efforts to maintain the agreed upon Response Times. Response Time is a metric exclusive to PCG’s Hosting Site.
- b) PCG agrees that the Special Education, MTSS, Service Documentation, and ECATS ODS modules of ECATS shall have an Uptime in the production environment of 99.71 percent or greater for each calendar month that this SLA and the Agreement are in effect. In the event that the foregoing monthly Uptime is not met for any calendar month during the term of the Agreement, the State shall be entitled to remedies in the form of an account credit in accordance with the table set forth below. All account credits shall be calculated by multiplying the ECATS Monthly Hosting Fee (which is a subset of the annual management fee) by the credit percentage that corresponds to the calculated Unscheduled Downtime.

Availability*	Unscheduled Downtime	Credit Percentage	Hosting and Equipment Costs
99.99%-99.7100%	4 min 19 sec - 2 hrs 5 min 18 sec	0%	\$300,000 per year/ \$25,000 per month
99.7099% - 99.5100%	2 hrs 5 min 19 sec-3 hrs 31 min 42 sec	20%	
>99.5099%	>3 hrs 31 min 43 sec	30%	
Total Possible Penalty Risk Per Year = \$90,000			

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

- a. Availability/Service Credit. The Service Credit will equal the applicable amount from the table above for the monthly recurring charges in the applicable month. Approved Service Credit(s) will be applied to the State's invoice during the next billing cycle. Service Credits issued in any month under this SLA will not exceed 30% of the State's total ECATS Monthly Hosting Fee.
- b. Service Credit. Service credit is calculation based. For the State this will amount to the monthly Hosting fee multiplied by the credit percentage that corresponds to the calculated Unscheduled Downtime with a monthly maximum of 30% of the monthly Hosting fee.

2.4 System Response time

- a) PCG agrees that the ECATS System Response Time shall be within 3.5 seconds for the maximum number of concurrent Users within the production environment ("Response Time Metric"). **Average System Response Time** is calculated by a third party vendor who will monitor the ECATS Response Time and provide an average system response time. Requests for administrative reconfiguration, system exports, imports, uploads and reporting are excluded from the Response Time Metric requirement due to the intensive nature of such large scale operations.
- b) If PCG fails to meet the Average System Response Time of 3.5 seconds on a monthly basis, the State shall be entitled to remedies in the form of an account credit, which PCG shall provide in accordance with the applicable Credit Percentage set forth in the table below. For the State this will amount to the monthly Hosting fee multiplied by the Credit Percentage that corresponds with the Average Response Time as set forth below with a monthly maximum of 15% of the monthly Hosting fee.
- c) If the system is not responding due to the lack of availability, then only the credits set forth in Section 2.3 related to system Uptime shall be applicable. This section is only applicable to this SLA.

AVERAGE RESPONSE TIME	CREDIT PERCENTAGE
<3.5 seconds	0%
3.50001 seconds - 5 seconds	10%
>5 seconds	15%

- d) Average System Response Time statistics within the production environment will be reported in the SLA Performance Report. System Response Time is measured from the server when responding to an

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

http/https request for various ECATS transactions.

2.5 Maximum Account Credit

The State acknowledges and agrees that: (a) the account credits contemplated by Sections 2.3, 2.4 and 4.4 of this SLA are remedies and represent the State's sole remedy for PCG's failure to meet the service levels set forth herein; and (b) the aggregate amount of account credits, for all instances where PCG in any given month does not meet the services levels set forth in Sections 2.3 or 2.4 or 4.4 of this SLA, shall not exceed 30% of the ECATS Monthly Hosting Fee in total. For example, if the Unscheduled Downtime in Month "X" is 140 minutes and the Average System Response Time is >5 seconds, the State would receive an aggregate account credit equal to 30% of the ECATS Monthly Hosting Fee for Month X and not a credit of 35% of the ECATS Monthly Hosting Fee for Month "X."

2.6 Scalability and Adaptability

a) The ECATS platform:

- i) Will accommodate an unlimited number of user accounts related to the ECATS solution. The ECATS Service shall provide support for 20,000 simultaneous database connections to ensure proper response times.
- ii) State requested changes to configuration and concurrency levels will need to be provided to PCG no less than 30 days prior to the requirement for those changes to take effect on production.
- iii) The ECATS Service shall scale the hardware platform and communication links responding to increased demand without fundamental architectural changes.

2.7 Outage Management

- a) From the release of the production version of the system and thereafter, PCG shall provide monthly, a Service Level Report (in a form to be agreed upon between PCG and the State as described in Appendix A) that measures of the following:
 - i) Scheduled maintenance, including the date and time performed, a detailed explanation of the maintenance performed, and the duration of each occurrence of maintenance.
 - ii) The total and incremental number of State and PK-13 Educational Institution incidents for the month, and availability and performance data.

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

- iii) In addition, PCG shall calculate the Downtime (both Scheduled and Unscheduled) each calendar month and shall include the date, time and duration of each occurrence of Downtime and provide same in the Service Level Report.
- b) From the release of the production version of the product and thereafter, a Preliminary Root Cause Analysis Report will be provided within twenty-four (24) clock hours for each Severity 1 Incident and a Final Root Cause Report shall be provided within 10 calendar days of Incident. For any Severity 2 Incident, upon request, a Preliminary Outage Report shall be provided within twenty-four (24) clock hours of the State's request for each Severity 2 Incident and an Outage Report shall be provided within 10 calendar days of request. Severity 1 and Severity 2 reports shall include a detailed description of the elements related to the Incident and in the detail known at that time by PCG, which may include root cause, duration, future risk and the methods employed to correct the problems. For each Severity 1 and Severity 2 Incident, a review of the remediation plan may be requested by the State. Severity 3 and Severity 4 Incidents shall be included in aggregate form on the Incident Report. Should the State require additional detail regarding any specific Severity 3 or 4 incident, PCG will provide such information to the State in a mutually agreeable format. The State or its designee shall have the right to inspect the calculation(s) for any severity report and if the State wishes to question the calculation, may express its desire in writing at which time the parties agree to meet and arbitrate on a mutually-agreed schedule and location to review the issue.
- c) PCG and the State will meet monthly to review overall end user experience, trending metrics and any other hosting issues.

2.8 Security

- a) PCG shall comply with applicable State security policies as found in Section 06 E-Commerce Issues, found at the following URL:
<https://it.nc.gov/statewide-resources/policies>. Any changes to the State security policies will be posted to the URL above. If these changes have a detrimental effect on any performance obligations of PCG, as determined by PCG, PCG will notify the State. At that time, PCG shall be relieved of any service levels associated with such performance obligation until such time as the Parties have mutually agreed upon a revised performance metric that accounts for the security policy changes. If it is anticipated by either Party that a security policy may have a detrimental effect on a performance obligation, or a detrimental effect is reasonably realized after the fact, the Parties agree to resolve the issue in good faith. The ECATS Service shall adhere to the security standards of The North Carolina

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

Department of Information Technology (NCDIT) and the State for authentication and access control. The ECATS Service shall provide ability to authenticate PK-13 Educational Institution employees and State Users via the NCEdCloud Identity and Access Management (1AM) Service (<http://iam.ncedcloud.org> and <http://ncedcloud.mcnc.org/resources>) using the SAML protocol. Authorized Users at the State and PK-13 Educational Institutions must be able to configure and assign Users to access control groups. The ECATS Service shall assign Users to access control groups based on roles defined in the 1AM system. The ECATS Service shall allow users who do not have an account through the 1AM Service to retrieve forgotten user names and passwords without contacting the Vendor.

- b) Access to the hosted environment shall be limited to certain employees of PCG and its subcontractors who have the job responsibilities required for such access. In all cases, specific User ID and passwords shall be required and shall be managed such that each User ID and password combination can be traced to an individual by the State, in the case of Users, or by PCG security staff in the case of technical and support staff of PCG or its subcontractors. The State shall be responsible for provisioning and maintaining ECATS User account information. PCG shall be responsible for provisioning and maintaining PCG system administration account information.
- c) The ECATS Service shall integrate with SSO (single sign-on) products for authentication and authorization. All transmitted data and authentication information over internal and external networks shall be encrypted. The communication of Confidential Information of the State in either direction between Users and the Hosting Site shall be through a secure environment determined by PCG.
- d) PCG or its approved subcontractor shall provide a multi-tiered security architecture of physical, network, web, system, application and data security to protect ECATS from intrusion and unauthorized access.
- e) PCG shall obtain and maintain a current SSL certificate for the ECATS Service on State and PK-13 Educational Institutions' behalf.
- f) Any confirmed security breach that affects the State data shall be reported to the State within 24 hours of confirmed security breach in accordance with reporting guidelines as stipulated by state and federal regulations. PCG shall coordinate a response to such security breaches with the State.

2.9 Backup and Recovery

PCG shall provide a multiple backup service (incremental, daily, weekly, full off-

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

site, grandfather-father-son media rotation) with a Recovery Time Objective of <= 24 hours and Recovery Point Objective <= 24 hours. All back up data will be encrypted.

2.9.1 Recovery Time Objective (RTO)

RTO relates to system downtime. It outlines the target time set for resuming services after an outage event.

The Recovery Time Objective is <= 24 hours

2.9.2 Recovery Point Objective (RPO)

RPO relates to recovery point (time between last backup and outage event). It outlines the point in time to which data must be restored to successfully resume system processing (maximum tolerable period in which data might be lost).

Recovery Point Objective is <= 24 hours

2.9.3 Backup Schedule and Retention

Backup schedules and retention policies will be gathered and implemented as needed to support the RTO and RPO objectives. In the event an incident occurs that requires recovery of data from a backup, PCG will coordinate the recovery with the State and the local PK-13 Educational Institution effected and any other party that may be impacted or needs to be informed.

2.10 Disaster Recovery

Disaster Definition: A Disaster is an unplanned event that causes a loss of access to or use of the State's Production Environment at PCG's primary data center for a period greater than 24 hours, as declared by the PCG. An outage that impacts a specific sub-set of the State's Users, but does not cause an impact to all the State Users, is not considered a Disaster. Some examples of what might cause a Disaster are the following:

- Natural disasters, such as fire, flood, earthquake or other natural disaster;
 - Complete power outage;
 - Complete network outage; and
 - Terrorist act affecting PCG's data center
- a) The transition of Hosting Services back to PCG facilities once those facilities are reconstructed and re-validated.

- b) Upon the occurrence, and periodically for the duration, of any Disaster, PCG shall provide regular reports and notices to the State regarding the status of PCG's response to, and recovery from, the disaster. PCG shall provide disaster recovery Services as described herein at all times irrespective of whether a force majeure event has occurred, unless the force majeure event prevents the performance of the disaster recovery services. PCG shall provide disaster recovery Services if the State notifies PCG that a disaster has occurred or if the PCG themselves identifies that a disaster has occurred.

PCG shall test and update the disaster recovery plan (including plans for data backups, storage management and contingency operations), and annually testing network connectivity between such alternate site and the applicable end-user sites.

3 System Maintenance and Support Services

This section describes the maintenance and support PCG will provide the State related to ECATS.

3.1 System Support Service Objectives

The following are general System Support Services for which PCG shall be responsible:

- a) PCG shall process, categorize and assess all changes to the ECATS environment, validating that changes to the ECATS are tested and controlled, and unplanned services disruptions are avoided.
- b) PCG shall notify the State of all necessary security patches that require a system outage.
- c) PCG shall oversee and maintain ECATS so that all software and hardware are supported technology, as deemed appropriate for the State business functions.
- d) PCG is providing Tier 1, 2 and 3 support, PCG shall provide Support Services via the PCG Help Desk, 7:30 AM - 5:30 PM Eastern Time Any Critical and Urgent (Severity 1 & 2) incidents will be handled on a 24 x 7 x 365 until resolved as indicated in Table 4.4.1 "Severity Levels" below.
- e) PCG personnel providing the Support Services pursuant to this document shall have expertise and be fully trained in problem identification and resolution relating to ECATS. PCG personnel shall provide access to PCG's software engineering and technical resources for quick resolution,

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

feedback, troubleshooting, and support.

- f) All incidents shall be logged in designated on-line support management software. The reported incidents shall be viewable in detail and summary format online by designated State Representatives.
- g) PCG shall provide to the State a monthly support incident analysis report, in a mutually agreed upon format.

3.2 General Responsibilities

The following are general Support Services for which PCG shall be responsible:

- a) PCG shall comply with all RFP-40-IT00114-15 Appendix B - "Module Technical Specifications" mandatory and desired requirements responded to with a '1' or '2' in PCG's RFP response.

3.3 System Maintenance Services

Subject to the terms and conditions of the Agreement and this SLA, PCG shall provide Maintenance Services for ECATS ("System Maintenance Services"). System Maintenance Services shall consist of the following:

3.3.1 ECATS Maintenance and Updates

- a) The State has three environments that will be hosted by PCG.
 - i) The Production Environment contains the "live" software, hardware, and data (databases) for ECATS and any other application or application component in use by the ECATS platform. Production covered on the disaster recovery procedures.
 - ii) The QA environment is used for functional testing of the current release software to ensure that all scheduled releases pass testing before being promoted to production. These tests focus on documented test cases and test results and are not intended to do overall data validation. The QA environment shall be made available to the State upon request and at times mutually agreed upon by the Parties.
 - iii) The Training environment is available to Users for training on the "live" software as mutually agreed upon by the Parties; however, data (databases) for ECATS within the Training environment may contain test data and not production data. The Training environment software

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

shall be at least the same version as the production environment.

- b) PCG shall periodically deploy releases of ECATS into the ECATS QA, ECATS Training, and ECATS Production environments as defined above.
- c) Upon request by the State, PCG shall refresh data from production into QA within forty-eight (48) business hours of request; notwithstanding the foregoing, the State acknowledges and agrees that there may be times when PCG, in its discretion, delays such a request contingent on and subject to then-current PCG software release testing cycles. In these instances, the State and PCG will mutually agree on the appropriate timing for a data refresh.
- d) Except in cases of emergency, PCG shall notify the State at least ten (10) days prior to activating each update unless a shorter time is mutually agreed upon. Notification shall include the following, at a minimum:
 - i) Date of Update activation;
 - ii) Notes describing the Update content;
 - iii) Date, time, and duration of time required to deploy the Update; and
 - iv) Test results of the update satisfactorily run in the ECATS QA or Training environment.

3.3 Maintenance Schedule

- a) Scheduled Maintenance- PCG shall perform routine maintenance on a regular basis. The maintenance shall be within the Service Levels defined in this Schedule. The maintenance shall be performed outside normal business hours and on a predefined maintenance schedule.
- b) Emergency Maintenance - Emergency maintenance may occasionally be required. PCG shall only take systems down for emergency maintenance when such events substantially threaten the security or operational stability of our clients. PCG shall work to notify impacted clients on a best effort basis, and shall strive for at least 24 hour notice - depending on the scheduling of the fix.

3.4 Update Management

Update Management activities include services required to appropriately manage and document changes to the application(s) and/or any of ECATS (Hardware, Software, Hosting etc., excluding services related to implementation) components

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

including associated costs if outside of agreed upon scope. Update management also includes services required to appropriately manage and document changes to the underlying ECATS hardware and software components including:

- a) Version Control-the maintenance, tracking and auditing of modifications to an application's components over time, facilitating the restoration of an application to prior development stages.
- b) Turnover Management-the promotion of software changes across different phases of the life cycle (e.g., development, unit test, systems test and production), including management of the approval process, production turnover and software migration control.
- c) Platform Change - the coordinated activities with State prior to any requested or required changes to the ECATS and hosting platform that may affect the service-level performance of any of the ECATS environments. Any changes to the baseline project plan must be documented using change management procedures defined during the ECATS implementation.
- d) Change Management - PCG shall provide change management services (based on Information Technology Infrastructure Library) to manage changes to ECATS that alter the existing state of ECATS, including software, hardware, networks and facilities. These changes may have associated costs if outside of agreed upon scope.

Planned and scheduled maintenance also includes software deployments. Software deployments are often performed outside of infrastructure maintenance windows. Software deployments are performed on a weekend whenever practical but may be done during the week beginning at or after 9:00 PM ET. If the system was brought down between Monday to Thursday and is not up and operational by the next business day at 6 AM ET, downtime will start accruing. If the system was brought down between Friday to Sunday and is not up and operational by Monday at 6 AM ET, downtime will start accruing. Not all software releases require an outage¹. PCG shall schedule and coordinate major releases with the State (and typically require User Acceptance Testing) and intends to notify the State at least 2 weeks in advance of a major release. PCG shall schedule and coordinate minor releases with the State and intends to notify the State at least 48 clock hours in advance of a minor release. Frequency is once a quarter for major releases and once a month for minor releases (not all months will have a minor release). Should a system-related downtime issue arise during the contract period, the State can contact the PCG Education Practice Area Consulting Support contact. PCG shall provide a primary and secondary contact and keep that information current for the State. Normal operating hours are Monday - Friday, 7:30 AM - 5:30 PM US Eastern Time Zone, except on holidays. PCG shall follow the described response

times as detailed in table 4.4.1 Severity Levels of this SLA. The on-call representative shall open a ticket for the issue in accordance with PCG Problem Reporting process and shall proceed with next steps based on this SLA.

¹For the avoidance of confusion, an outage is defined as system unavailability or a loss of all functionality to all users within an instance for either Special Education module, MTSS module, Service Documentation module, or ECATS ODS.

3.5 Monitoring and Reporting Services

PCG shall provide 24 X 7 X 365 monitoring services that include the activities associated with the ongoing surveillance, tracking, problem escalation, resolution and reporting of application development problems. This monitoring shall include, but is not limited to:

- a) Monitoring the status of the application and notifying the operations team of potential issues;
- b) Monitoring the connections between the different layers of ECATS;
- c) Monitoring for critical exceptions within the application;
- d) Monitoring the transaction and login rates for capacity and security;
- e) Monitoring the connections between the different layers of the system and the public internet;
- f) The Monitoring Plan shall provide a specific list of all physical devices, hosts, ports, URLs, websites and other components that are required to be actively monitored;
- g) The Monitoring Plan shall include the provisions for the detection of actions that attempt to compromise the confidentiality, integrity or availability of resources or data.

4 ECATS Application Support Services

Subject to the terms and conditions of the Agreement and this SLA, PCG shall provide the Support Services described herein for all components of ECATS, including hardware and third party supplied system software chosen by PCG. Unless otherwise specified herein, PCG will provide the Support Services from 7:30 AM to 5:30 PM EST, Monday through Friday, except during designated North Carolina State holidays.

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

4.1 Support Services Scope

PCG shall provide the following Support Services in accordance with this SLA and a Standard Operating Procedure (“SOP”) to be developed and mutually agreed upon by the Parties in accordance with Section 8 below

- i) Receipt and review of issues submitted via Zendesk or phone
- ii) Assignment and revision of the severity level of tickets
- iii) Response to tickets submitted via Zendesk or phone
- iv) Resolution or escalation of tickets

4.2 Support Services Tier Levels

Support Service Levels

- i. Tier/Level 1 (T1/L1) - This is the initial support level responsible for basic customer issues. It is synonymous with first-line support. The first job of a Tier I specialist is to gather the customer's information and to determine the customer's issue by analyzing the symptoms and figuring out the underlying problem. This level should gather as much information as possible from the end user. Once identification of the underlying problem is established, the specialist can begin sorting through the possible solutions available.
- ii. Tier/Level 2 (T2/L2) - This is a more in-depth technical support level than Tier I and the techs are more experienced and knowledgeable on a particular product or service. It is synonymous with level 2 support.
- iii. Tier/Level 3 (T3/L3) - This is the highest level of support within the organization responsible for handling the most difficult or advanced problems. It is synonymous with level 3 support. These individuals are experts in their fields and are responsible for not only assisting both Tier I and Tier II personnel, but with the research and development of solutions to new or unknown issues.
- iv. Tier/Level 4 (T4/L1) - A fourth level of support often representing an escalation point beyond the organization. This is generally a hardware or software vendor.

4.3 Support Services Overview

a. Tickets

- i. All support issues may be handled via ‘tickets’ reported through PCG’s Zendesk ticketing management system available in ECATS. Critical or

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

Urgent issues may be reported via a phone number to be provided by PCG; in such case, PCG will enter the report as a ticket in Zendesk. A Ticket is the mechanism for documenting information and is used for communicating and escalating user-reported issues. PCG is responsible for receiving and qualifying tickets to identify actions to be taken, gather additional information about each ticket received, and determine how each ticket will be responded to and resolved, or routed for additional support when necessary.

b. LEA Internal Support Resources

- i. LEAs will have internal LEA support resources, which will consist of individuals who have been “credentialed” to provide local ECATS support. NCDPI shall determine requirements for an individual to be considered “credentialed.”
- ii. NCDPI may grant access for up to 5 users at each LEA who may submit tickets through the Zendesk ticketing management system.
- iii. These credentialed users at each LEA will have access rights that are limited to entering tickets in Zendesk and do not constitute ‘agent’ privileges including, but not limited to, reporting, ticket handling, etc. Tickets submitted by credentialed users at an individual LEA will be visible in a view-only state to the other users at the same LEA and to NCDPI users.

All Support Service tickets shall be maintained in the PCG’s Zendesk ticketing system for ECATS. The scope of support services excludes addressing issues and questions solely related to state or local business decisions and associated policies, or questions pertaining to hardware components at the NCDPI, LEA, and user level. These inquiries and tickets will be directed back to the originating LEA to be addressed at local or state levels, as appropriate and the ticket will be closed

4.4 Service Levels, Severity and Escalation Procedures

- a) PCG shall provide support between the hours of 7:30 a.m. and 5:30 p.m. Eastern Time, Monday through Friday (excluding North Carolina state holidays) with minimum compliance to the service level mentioned below.
- b) PCG shall assign an appropriate severity level based on the severity level descriptions contained in Table 4.4.1 below and shall convey such designation to the State when reporting the issue. The severity level will be the basis for the prioritization of work to resolve tickets. Support personnel shall revise the severity level designation for a ticket as needed,

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

based on emerging information. Such change will be made or approved by the assigned supervisor of the support personnel and will be reported to the ticket submitter

- c) If the State or the LEA does not agree with PCG's designation of the severity level for any issue, it shall indicate the severity level the State's attributes to the issue as soon as possible, but in any event by the end of the Initial Response time for the severity level originally designated by the State. PCG shall notify the State of the updated severity level.
- d) The Parties shall work in good faith to agree upon the appropriate severity level provided that such determination shall not unreasonably delay the implementation of a solution to the issue.
- e) Problem Resolution time begins when PCG becomes aware of the issue, whether through notification by the State, a user, PCG's own internal monitoring or otherwise, whichever occurs first.
- f) Complaints: For any incident reported with unsatisfactory results not in compliance with Service Levels, the State shall escalate to the PCG Contract Administrator.
- g) Clocking of Tickets : Severity 3, 4, and 5 tickets submitted after hours will be "clocked" as of the start of the next working shift. For avoidance of doubt, a ticket submitted at 5:31 pm on Tuesday, will be clocked as arriving at 7:30 am on Wednesday – assuming no holidays. Similarly, a ticket submitted at 5:31 pm on Friday will be clocked as arriving 7:30 am on Monday, assuming no holidays.
- h) Initial Response Time is the amount of elapsed time between a ticket being submitted (clocked in accordance with "clocking of tickets" outlined above) and PCG's Response, which consists of PCG's communication to the user that the ticket was received, registered, assigned a severity level, and the identity of support personnel to whom the ticket is assigned.
- i) Information and Deferral: NCDPI and LEAs are required to provide sufficient available information relevant to the circumstances of tickets they submit. If the provided information is insufficient, PCG will request reasonable additional information from the ticket submitter. Upon such a request by PCG, the ticket will be considered deferred for the purposes of SLAs, until such time as the ticket submitter provides the reasonable additional information. If the ticket submitter does not provide sufficient information to PCG's request within ten (10) business days, the deferred ticket may be closed.

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

- j) Resolution refers to correction, a satisfactory interim workaround, the closure of a deferred ticket due to lack of response by the ticket submitter, the closure of tickets because of ticket duplication, or the determination that the ticket is unrelated to the operation of ECATS. Upon Resolution, PCG will notify the ticket submitter of such Resolution via email with reference to the ticket number, a brief description of the Resolution, and a notification that the ticket will be closed.

4.4.1 Support Service Response Requirements

Support Service Requirements measured on a monthly basis are the performance metrics related to providing timely information and resolution incidents reported by the State during operation of the ECATS solution.

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

Table 4.4.1 Severity Levels

Severity Level	Title	Description	Notes	Initial Response ¹	Problem Resolution ²
1	Critical	The system is unavailable to a large portion of the product's users or a <u>major and vital</u> feature of the system is unavailable to a large portion of the product's users adversely affecting the ability to use the core product. There is <u>no work-around</u> .	This pertains to the software working or not working for all – or a vast majority of users attempting to access the system. For instance, printing could be considered a vital feature, however if one user has a problem printing a report, this would not constitute a Sev-1 incident – it is likely a printer configuration issue for that one user.	<p><u>Prime Time: M-F¹</u> 7:30 am – 5:30 pm EST Response to defect within 45 minutes</p> <p><u>Non-Prime Time: M-F⁴</u> 5:31 pm – 7:29 am EST Response to defect within 90 minutes</p> <p><u>Weekends/Holidays⁴</u> 7:30 am – 5:30 pm EST Response to defect within 120 minutes</p> <p><u>Weekends/Holidays⁴</u> 5:31 pm – 7:29 am EST Response to defect within 180 minutes</p>	24 hours
2	Urgent	The system is unavailable or a <u>major</u> feature of the system is unavailable to one or more users. There <u>will be a workaround</u> although it may not be as efficient as the application should be.	The critical difference between a Sev-1 and a Sev-2 hinges on whether the user is un-able to do work, or is able to do work	<p><u>Prime Time: M-F³</u> 7:30 am – 5:30 pm EST Response to defect within 90 minutes</p> <p><u>Non-Prime Time: M-F⁴</u> 5:31 pm – 7:29 am Response to defect within 120 minutes</p> <p><u>Weekends/Holidays⁴</u> 7:30 am – 5:30 pm EST Response to defect within 120 minutes</p> <p><u>Weekends/Holidays⁴</u> 5:31 pm – 7:29 am EST Response to defect within 180 minutes</p>	Anticipated within 3 Business Days, not to exceed 5 Business Days

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

3	Essential	A <u>minor</u> feature of the system is unavailable or not functioning properly for one or more users. There is <u>no work-around</u> although the feature is not critical.	This is used for a problem that needs to be fixed, is essential to system operation however does not impede the client from working and making meaningful progress in accomplishing primary tasks. The difference between Sev-2 and Sev-3 is the relative importance of the feature impacted.	<u>Prime Time: M-F³</u> 7:30 am – 5:30 pm EST Within 12 business hours <u>Non-Prime Time: M-F⁴</u> 5:31 pm – 7:29 am EST Response to defect within 2 business days <u>Weekends/Holidays⁴</u> Response to defect within 2 business days	Next Release Cycle or later date if approved by the State or by the LEA initiating the ticket
4	Important	A <u>minor</u> feature of the system is unavailable or not functioning for one or more users. There <u>is a workaround</u> although it may not be as efficient as the application should be.	This is used for a problem that needs to be fixed, is essential to system operation however does not impede the client from working and making meaningful progress in accomplishing primary tasks. The difference between Sev-3 and Sev-4 is the existence of a workaround solution.	<u>Prime Time: M-F³</u> 7:30 am – 5:30 pm EST Response to defect within 4 business days <u>Non-Prime Time: M-F⁴</u> 5:31 pm – 7:29 am EST Response to defect within 5 business days <u>Weekends/Holidays⁴</u> Response to defect within 5 business days	Next Release Cycle or later date if approved by the State or by the LEA initiating the ticket
5	Inquiry	Generally a noncritical issue or a question about functionality	This is used for questions or noncritical issues.	<u>Prime Time: M-F³</u> 7:30 am – 5:30 pm EST Within 4 business days	N/A

¹ Initial ticket or phone response from PCG acknowledging incident and severity level to Designated State Representatives.

² PCG shall provide correction or a satisfactory interim workaround to the State.

³ Incident reported during Normal Support Hours.

⁴ Incident reported outside Normal Support Hours.

Any incident arising out of or caused by an Excluded Event (as defined in Section 2.3(a)(iv)) is not subject to the requirements set forth in Table 4.4.1.

5 Pricing and Band Level

Pricing for Tier 2, Tier 3, and Tier 4 Support Services is included in the annual Management Fee under the Contract.

Pricing for Tier-1 Support Services will be determined by Service Period and Band Level, the latter of which is based on actual monthly ticket volume.

a. Band Level

Band Level is a classification determined by the number of tickets received by PCG from credentialed LEA users for a calendar month in accordance with the ranges of the Total Monthly Tickets in the table below. For example, and for the sake of clarity, for a month in which the total tickets received are 15,000, the applicable amount for the month would fall within the range of Band Level B5 and would be assigned a Monthly Price of \$105,830.

Band Level	Total Monthly Tickets	Monthly Price
B1	0-5,200	\$53,004 (for months 1-6) \$44,004 (for months 7 and thereafter)
B2	5,201-7,800	\$60,543
B3	7,801-10,400	\$75,481
B4	10,401-13,000	\$88,817
B5	13,001-15,600	\$105,830
B6	15,601-18,200	\$119,166
B7	18,201-20,800	\$134,104
B8	20,801-23,400	\$151,117
B9	23,401-26,000	\$164,453
B10	26,001-28,600	\$177,789
B11	28,601-31,200	\$192,727

b. Pricing

Tier-1 monthly pricing will be in accordance with the Band Levels in the table above and based on actual monthly ticket volumes. Pricing will be no less than the B1 Band Level per month. If ticket volume projections exceed Band Level B11, then the parties will negotiate additional band levels in good faith that are commensurate with the existing band level pricing differentials.

6 Invoicing

PCG will submit Tier-1 support invoices on a monthly basis, at the end of each month based on the appropriate Band Level for the completed month in accordance with Section 5 above. Monthly invoice amounts will include adjustments associated with applicable credits identified in the month associated with the invoice.

- a. PCG will submit a proposed invoice for NCDPI approval for the prior month's service.
- b. NCDPI will have ten (10) business days from receipt of PCG's proposed monthly invoice, which shall not be deemed to be received until such time as PCG has complied with Section 4 for the month, to dispute any credit adjustments or any calculations or data upon which the credit adjustments in the monthly invoice were based. NCDPI will provide reasonable details as to the reason for any dispute. If NCDPI does not dispute such amount within said time, the amount of account credit provided for in the invoice, if any, will be deemed as being accepted. PCG will respond to any dispute within ten (10) business days.
- c. Once PCG and NCDPI resolve any dispute to the proposed invoice within the resolution period, PCG will deliver an official monthly invoice.
- d. Upon receipt, as defined above, of PCG's monthly invoice, NCDPI will pay the monthly invoice amount not in dispute in accordance with the Contract.
- e. Notwithstanding anything to the contrary, disputed account credit shall not expire at the termination or expiration of this Amendment or the Contract.

7 Reporting and Access

PCG will grant NCDPI up to four user licenses to Zendesk enabling access to an electronic dashboard for the purpose of viewing data and reports on demand and entering or commenting on tickets. The metrics to be provided are described in the following section. NCDPI shall have access to review all tickets.

a. On-Demand Dashboard

Metrics will be summarized in an electronic dashboard created by PCG, which is accessible via Zendesk. This dashboard will include at a minimum the following:

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

- Real time view, i.e. current state of open tickets and aging analysis
- The ability to navigate through the data to review metrics and groupings of metrics
- The ability to print the current view or standard report(s) in a distributable format
- The ability to download data to offline-viewable format

b. Period-Based Standard Reports

Period-based Standard Reports will be available in Zendesk

- The ability to navigate through period-based data to review metrics and groupings of metrics. Periods include:
 - Time slice: first half of day, second half of day, hour, half-hour
 - Fixed: day, week, month, quarter, annual calendar, annual fiscal
- The ability to print the report(s) in a distributable format
- The ability to download data to offline-viewable format

c. Monthly Report and Review Meetings

PCG will meet with NCDPI on a monthly basis to review the status of the services and the monthly report. PCG shall provide to NCDPI a monthly report (or access thereto) no less than three business days prior the monthly meeting which shall include at a minimum, the following:

- A review of Support Desk performance
- A summary, including the overall status, metrics reporting, supporting reasons for metric deviation, and items that may need adjustment within the service level
- A summary of tracked, unresolved issues from activities which impact the service level
- An update of progress and resolution for issues or activities that affect service level
- Aging analysis for tickets closed in the prior month and open tickets

d. Quarterly Report and Review Meetings

After the third month of each calendar quarter, a quarterly review meeting will convene, to include the following:

- Service levels and metrics will be reviewed by NCDPI and PCG to determine whether service level adjustments need to be made, along with resulting price adjustments

e. Discrete Metrics to be Tracked

The following metrics will be tracked by Zendesk for the purposes of reporting. All metrics, regardless of periodicity, shall be distinguishable by multiple context:

- Total ticket counts and ticket counts by Severity levels
- Ticket summary Status: open (unresolved-working and resolved-not yet closed), closed (will not resolve and resolved), abandoned
- By tier
- Across all tickets
- A combination of contexts
- Response time and resolution time reporting en mass and by severity

Metric	Average	Percentage	Number
Resolution time	X		X
Response time	X		X
Ticket			X
Ticket resolution by severity level		X	X

f. NCDPI access to the system

PCG acknowledges that the NCDPI designated users may also submit tickets on behalf of an LEA or LEAs.

NCDPI will have the ability to monitor the status of existing cases, submitted via all channels by the NCDPI or LEAs.

PCG will grant four NCDPI team members with access to all tickets/cases regardless of status. These NCPDI users will have the ability to provide comments on specific tickets in a comment field but will not have the ability to change the status or other fields in the ticket. These four licenses are also referenced in Section 4. Reporting and Access.

8 Standard Operating Procedures

PCG and NCDPI will collaborate and deliver a Standard Operating Procedure (“SOP”) document within 45 days after execution of this SOW. The SOP shall describe procedures including but not limited to:

- Detailed guidelines for response and assignment of severity level to a ticket
- Ticket escalation process
- Resolution process
- Notification process for Critical and Urgent tickets
- Provision of telephone support numbers
- Procedure for telephone and or electronic method of reporting critical tickets outside working hours
- SLA reconciliation procedures for application outages and availability metrics.
- Procedures for handling tickets between other vendors and tickets to be sent from PCG back to NCDPI to be worked by other vendors
- Procedures for report generation and delivery within Zendesk
- Identify PCG designee that NCDPI staff will contact via mobile phone to report a Severity 1 critical issue outside of Business Hours-

9 Service Level Agreements

a. Severity 1, 2, and 3 Resolution Account Credit

- i) In the event that the foregoing Problem Resolution timeframes set forth in in the Severity Level Table in Section 4 for any Severity 1, Severity 2, or Severity 3 incidents are not met, due to actions or inactions reasonably within PCG 's control, NCDPI shall be entitled to remedies in the form of an account credit. This credit shall be calculated using the ECATS Monthly Hosting Fee, as specified in Attachment B to Amendment 4 to the Contract, and in accordance with the following:
 - Failure to meet Problem Resolution time as listed above for Severity 1, Severity 2, or Severity 3 issues shall result in per incident account credit equal to 0.5% of the applicable ECATS Monthly Hosting Fee.
 - Failure to provide Problem Resolution for any incident within 180 days, unless agreed to by both Parties, shall result in an account credit equal to 0.3% of the applicable ECATS Monthly Hosting Fee per applicable incident on a quarterly basis until such issue is resolved.
- ii) Account Credit for PCG’s failure to meet Severity 1, 2, and 3 Resolution timeframes is limited to 15% of the ECATS Monthly Hosting Fee for the applicable month.

b. Severity 4 and 5 Resolution Account Credit

- i) In the event that the foregoing Problem Resolution timeframes set forth in in the Severity Level Table in Section 4 for any Severity 4 or Severity 5 incidents are not met, due to actions or inactions reasonably within PCG 's control, NCDPI shall be entitled to remedies in the form of an account credit.

c. Service Level Credits

- i) Service level credits under this Amendment 4 are limited to a total credit amount equal to no more than 2% of the ECATS Tier-1 support monthly invoice for the applicable month in which the credit is provided.
- ii) It is noted that NC DPI is entitled to the maximum credit for each incident in accordance with the service credit calculations as noted in the SLA. However, it is also noted that a single incident, can result in only one form of credit; if warranted in accordance with service credit calculations. For avoidance of doubt, if an incident results in an outage that justifies NC receiving a credit for that outage, that same incident cannot also receive a resolution time credit as this would reflect two separate credits for a single incident.

d. Notwithstanding the foregoing,

- i) If PCG fails to meet any one of the service levels described in 5.c for two consecutive months, the total credit amount limit described in 5.a.2 above shall increase to 4% for any monthly invoice consecutively following PCG's failure to meet service levels for the two preceding months.
- ii) If PCG fails to meet any one of the service levels described in 5.c, for three consecutive months, then for any monthly invoice consecutively following PCG's failure to meet service levels for the three preceding months:
 - the total credit amount limit described in 5.a.2 above shall be increase to 6%;
 - The monthly credit percentage for each of the service levels described in 5.c shall be increased to 3% of that month's invoice.
- iii) If PCG fails to meet any one of the service levels described in 5.c for four consecutive months, then for any monthly invoice consecutively following PCG's failure to meet service levels for the four preceding months:
 - the total credit amount limit described in 5.a.2 above shall increase to 8%;
 - The monthly credit percentage for each of the service levels described in 5.c shall be increased to 4% of that month's invoice.
- iv) For the sake of clarity, if PCG fails to meet any one of the service levels described in 5.c in January and February, the total credit amount that PCG faces for any such service levels failures in March would increase to 4% of the ECATS Tier-1 support monthly invoice. If PCG does not have any service level failure in March, the total credit amount

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

would revert at no more than 2% of the ECATS Tier-1 support monthly invoice until PCG fails to meet any one of the service levels described in 5.c in two new consecutive months.

- But if PCG fails to meet any one of the service levels described in 5.c also in March, the maximum total credit amount that PCG faces for any such service levels failures in April would increase to 6% of the ECATS Tier-1 support monthly invoice and the individual monthly credit percentage for each service level failure in April would increase to 3% of that month’s invoice. If PCG does not have any service level failure in April, the total credit amount would revert to 2% of the ECATS Tier-1 support monthly invoice until PCG fails to meet any one of the service levels described in 5.c in two new consecutive months at which point the terms of 5.a.3.i would be triggered once again.
- But if PCG fails to meet any one of the service levels described in 5.c also in April, the maximum total credit amount that PCG faces for any such service levels failures in May and any consecutive failing month would increase to 8% of the ECATS Tier-1 support monthly invoice and the individual monthly credit percentage for each service level failure in May and any consecutive failing month would increase to 4% of that month’s invoice. If PCG does not have any service level failure in May, the total credit amount would revert to 2% of the ECATS Tier-1 support monthly invoice until PCG fails to meet any one of the service levels described in 5.c in two new consecutive months at which point the terms of 5.a.3.i would be triggered once again .

e. Service level credits for failure to meet Severity 4 and Severity 5 Resolution timeframes will not begin accruing until, and for services rendered on or after, April 1, 2020.

f. Severity 4 and Severity 5 Resolution Table

Type	Measurement	Credit
Severity 4 and Severity 5 — Resolution	In a given month, 95% or more of- Severity 4 and Severity 5-tickets are resolved in accordance with the Severity Level Table in Section 4 above.	2% of the Tier 1 Support fee for that month.

g. **Account Credit.**

A deduction from PCG’s invoice, expressed as a percentage of the agreed upon service delivery fee for that month, in which an identified SLA was not met. NCDPI’s assessment of a service level credit will be an exclusive remedy for PCG’s failure to comply with a service level requirement set forth herein.

h. Reporting Service Levels

PCG will configure reports and make them available within Zendesk. NCDPI will be provided with four licenses to access Zendesk.

Type	Measurement
Monthly Report(s)	Delivered at monthly intervals and not less than two business days before scheduled review meeting
Quarterly Report(s)	Delivered at quarterly intervals and not less than two business days before scheduled review meeting

i. Ticket Response

Ticket Response	In a given month, 95% or more of all tickets are responded to in accordance with the Severity Level Table in Section 4 above.	2% of that month's Tier 1 support fee.
-----------------	---	--

- i) Service level credits for failure to meet Ticket Response timeframes will not begin accruing until April 1, 2020.

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

APPENDIX A - SLA PERFORMANCE REPORTING

Below is an example of the SLA Performance Report. PCG and the State will jointly create an SLA Performance Report that will be provided monthly to the State indicating system performance against agreed upon Service Level Agreements.

SAMPLE SLA REPORT

COMMITMENT	STANDARD	ACTUAL	ACTIONS
System Availability			
System Response Time			
System Logins			
User Logins by Location			

NCSBE/PCG SLA for ECATS Environments Hosted at PCG

APPENDIX B - SLA SCOPE CHANGE REQUEST FORM

Below is an example of a scope change request form that may be used by the State and PCG. Additionally, PCG and the State will jointly create an SLA Scope Change Request Form.

SLA Scope Change Request Form

Requester Information

Name		Title	
Division		Department	
Request Date		Return By (Date)	
Phone		Email	

Description of Change

-Describe the change and its necessity. How urgent is it? Include the impact of NOT implementing the change.

Impact of Change: Schedule, Financial, and Quality

-How will this change affect the project schedule, budget, and quality of the product?

Scope Change Acceptance

Department of Public Instruction	PCG
ECATS IT Manager – Traci Tillis	Date
ECATS Business Owner – Sherry Thomas	Date

SLA Amendment Number:		Effective Date:	
-----------------------	--	-----------------	--

AMENDMENT NUMBER 4 TO CONTRACT NUMBER 40-IT00114-15

ECATS CONTRACT

Contract for Request for Proposal No. 40-IT00114-15 Exceptional Children Accountability Tracking System (as amended, the “Contract”), between the **North Carolina Department of Public Instruction**, located at 301 North Wilmington Street, Raleigh, North Carolina, 27601 (“NCDPI”) and **Public Consulting Group, Inc.**, located at 148 State Street, Boston, MA 02109 (“Vendor”) (collectively referred to as the “Parties”) is hereby amended as follows:

1. Under this **Amendment 4**, Vendor shall provide professional services, in addition to those set forth in the Contract, as outlined in Attachment A, "NCSBE Exceptional Children Accountability and Tracking System Service Level Agreement for Public Consulting Group Hosting and Support Services," appended hereto.
2. NCDPI hereby agrees:
 - a) To pay Vendor an amount not to exceed \$2,312,724 annually and in accordance with billing and payment terms set forth in Attachment A, said sum to be full and complete payment for the professional services to be rendered under this Amendment.
 - b) This amount set forth herein is in addition to the payments to be made by NCDPI to Vendor under the terms and conditions of the Contract for the services rendered therein.
3. For the sake of clarity, the total amounts not to exceed for **Amendments 3 and 4** are as follows:
 - a) The three payments associated with the remainder of the Year 2 Management Fee shall not exceed \$2,415,000 in total.
 - b) The payment for the Schools Interoperability Framework deliverable, provided the conditions in **Amendment 3** are satisfied, shall not exceed \$92,445.
 - c) The two payments associated with the Year 1 Retainage shall not exceed \$483,000 in total.
 - d) The total Management Fee for Year 3 shall not exceed \$3,220,000.
 - e) The Management Fee for the optional Year 4 shall not exceed \$3,220,000.
 - f) The Management Fee for the optional Year 5 shall not exceed \$3,220,000.
 - g) The professional services fees described in Paragraph 2 section a) of **Amendment 4** above shall not exceed \$2,312,724 annually.
 - h) The total fees associated with **Amendments 3 4**, including the amount specified in Paragraph 2 Section a) above and the Management Fees for both optional Years 4 and 5 shall not exceed \$19,588,617.
4. In addition, the Parties hereby agree to modify the terms of **Amendment 3** to the Contract as follows:
 - a) The following subsection shall be added to Paragraph 4 of **Amendment 3** to the Contract:
 - d. “Effective upon acceptance of each of these payments, Vendor agrees to release and forever discharge NCDPI from any and all claims, demands, and causes of action of any kind, known or unknown, which may exist against NCDPI arising out of or related to any payments,

deliverables, or services so associated; provided that effective upon acceptance of the final Year 2 Management Fee payment described in this Paragraph, Vendor agrees to release and forever discharge NCDPI from any and all claims, demands, and causes of action of any kind, known or unknown, which may exist against NCDPI arising out of or related to the Year 2 Subscription Fee, the Year 2 Management Fee, and any other payments, deliverables, or services so associated.”

- b) The following subsection shall be added to Paragraph 6:
 - c. “Effective upon acceptance of the final Year 1 Retainage payment, Vendor agrees to release and forever discharge NCDPI from any and all claims, demands, and causes of action of any kind, known or unknown, which may exist against NCDPI arising out of or related to any payments, deliverables, or services associated with Year 1.”
- 5. The Parties agree that Attachment A, “NCSBE Exceptional Children Accountability and Tracking System Service Level Agreement for Public Consulting Group Hosting and Support Services,” appended to this **Amendment 4** replaces previous versions of the Parties’ Service Level Agreement.
- 6. The effective date of this **Amendment 4** between NCDPI and Vendor will be July 17, 2019. This Amendment will remain in effect so long as the Contract is in effect, including any extension(s) agreed upon subsequent to the execution of this Amendment. If there is a termination or expiration of the Contract, then this Amendment will be terminated. NCDPI may terminate the services provided in this Amendment upon thirty (30) days’ written notice to Vendor. In the event of termination or expiration of this Amendment, Vendor shall be paid any compensation for all services provided prior to the termination or expiration of the Amendment, as applicable.
- 7. Notwithstanding anything to the contrary, the first 90 days after the Effective Date of this Amendment will be considered the “Ramp-Up Period.” During the Ramp-Up Period, NCDPI and Vendor agree that PCG will engage in commercially reasonable efforts to comply with the obligations set forth in this Amendment. In the event, Vendor fails to employ such efforts, NCDPI will notice Vendor of its failure and it will have until the end of the Ramp-Up Period to cure such failure. Upon the completion of the Ramp-Up Period, Vendor will comply with all obligations set forth in this Amendment.

In addition, during the Ramp-Up Period NCDPI will provide, upon Vendor’s request, up to two NCDPI staff members (“Supplemental Staff”) who will supplement Vendor’s support team.

- a) Supplemental Staff will receive all training as may be necessary to assist Vendor during the Ramp-Up Period.
 - b) Supplemental Staff will receive access to systems deemed necessary by Vendor for the Supplemental Staff to provide such assistance during the Ramp-Up Period.
 - c) For clarity, Supplemental Staff shall not be considered to supplant Vendor staff, but merely to supplement.
 - d) This provision does not alter any payment terms under this Amendment.
- 8. If any of the services rendered under this **Amendment 4** are to be paid with federal funds, Vendor hereby certifies that the organization and its principals are not suspended or debarred from doing business with the federal government.

9. Except as modified by this **Amendment 4**, all remaining terms and conditions contained in the Contract shall remain in full force and effect.
10. In the event of any inconsistency between or among the terms and conditions contained in the documents comprising the Contract, any such inconsistency or conflict shall be resolved by giving precedence in the following order: (1) this **Amendment 4**; (2) Amendment 3; (3) Amendment 2; (4) Amendment 1; (5) the Contract document dated February 14, 2017, which encompasses Best and Final Offers 1-5 and Vendor's response to the RFP.
11. Each individual signing below warrants that he or she is duly authorized by their respective Party to sign and bind said Party to the terms and conditions of this Amendment.
12. Transmission and receipt of this document via facsimile or other electronic means shall be treated as original signatures for all purposes hereof and shall have the same legal effect as receipt of the original executed document by mail or any other acceptable means of delivery.

This Space Intentionally Left Blank.

Signature Page Follows.

IN WITNESS WHEREOF, Public Consulting Group, Inc. and the North Carolina Department of Public Instruction have signed this **Amendment 4** on the dates set forth below.

**NORTH CAROLINA
DEPARTMENT OF
PUBLIC INSTRUCTION**

PUBLIC CONSULTING GROUP, INC.

By: _____

By: _____

Name: Barbara Roper

Name: _____

Title: Chief Financial Officer

Title: _____

Date: _____

Date: _____

By: _____

Name: Mark Johnson

Title: North Carolina Superintendent of Public Instruction

Date: _____

Executed pursuant to Contract Procedure rule CNTR-002, following review and approval by the North Carolina State Board of Education