

NYSED – CONTENT MANAGEMENT AND SYSTEM SERVICES RFP

ATTACHMENT 6.4 – MAINTENANCE AND SUPPORT SERVICES

1. **Definitions.** The definitions below shall apply to this Schedule. All capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the EDP License and Services Agreement (the “Agreement”).
 - 1.1. **“Defect”** An error, flaw, mistake, failure, fault or “undocumented feature” in the EDP that causes a deviation, which in NYSED’s reasonable discretion is detrimental, from its intended behavior or performance as specified in its written specifications.
 - 1.2. **“Designated Representatives”** means the NYSED’s support and management staff, who shall be authorized to contact Contractor for the purpose of obtaining Call Center assistance.
 - 1.3. **“Maintenance Services”** means the maintenance services to be provided by Contractor pursuant to this Schedule and the Contract.
 - 1.4. **“Normal Business Hours”** means the hours between 8:00 a.m. and 5:00 p.m. in the Eastern United States time zone.
 - 1.5. **“Support Services”** means the support services to be provided by Contractor pursuant to this Schedule and the Contract.
 - 1.6. **“Term”** means the duration set forth in the Agreement.
2. **Service Objectives.** The objective of the Services is to ensure consistent, high quality delivery of Support Services and Maintenance Services for the EDP. Contractor shall provide the Maintenance Services and Support Services defined in this Schedule in accordance with the Service Objectives, Procedures, Service Levels and Penalties defined in this Schedule.
 - 2.1. Contractor shall process, categorize and assess all changes to the EDP environment, validating that changes to the EDP are tested and controlled, and unplanned services disruptions are avoided.
 - 2.2. Contractor shall oversee and maintain the EDP so that all software and hardware are current and supported technology, as deemed appropriate for the NYSED business functions.
 - 2.3. Contractor shall provide Support Services via the Call Center, E-mail Support and Web-based Support 24 hours a day, seven days a week during the Term to Designated Representatives Contractor shall provide access to Contractor’s support resources for quick resolution, feedback, troubleshooting, and support. All Contractor personnel providing the Support Services pursuant to this Appendix shall have expertise and be fully trained in problem identification and resolution relating to the EDP System. Contractor personnel shall provide access to Contractor’s software engineering and technical resources for quick resolution, feedback, troubleshooting, and support. 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 Representatives.
 - 2.4. Contractor shall provide to the NYSED a monthly support incident analysis report, in a mutually agreed upon format.

3. **General Responsibilities.** The following are general Support Services for which the Contractor shall be responsible:
- 3.1. **Access to Archived Data.** Contractor shall provide the NYSED with access to archived data from the EDP consistent with the Agreement and SOW.
 - 3.2. **Security.** Comply with New York State and NYSED security policies, regulations, and standards applicable to the EDP for information, information systems, personnel, physical and logical security.
 - 3.3. **Termination Data.** Upon termination of the Agreement Contractor will provide or make available an encrypted copy of the NYSED Data to the NYSED. Upon acknowledgement of verified receipt of the data by the NYSED, Contractor shall completely and irreversibly remove or erase all NYSED Data from its systems.
 - 3.4. **Policies, Procedures and Standards.** The Contractor is responsible for conforming to the policies and procedures of NYSED as outlined in the RFP, including governance standards. Contractor employees using NYSED resources either on site, onshore, or offshore shall adhere to all NYSED policies and procedures as outlined in the RFP.
 - 3.5. **The policies and procedures shall be provided as needed by the NYSED.** This includes but is not limited to policies and procedures for Security and Code of Conduct (e.g., Internet usage, passwords, access to NYSED production systems and intellectual property, etc.). Changes in policies which cause a material change in the scope of the EDP will be subject to the Change Control Management process as set forth in the Agreement.
4. **Maintenance Services.** Subject to the terms and conditions of the Agreement and all Appendices and Schedules thereto, Contractor shall provide Maintenance Services for the EDP System. Maintenance Services shall consist of the following:
- 4.1. **EDP Maintenance and Updates**
 - 4.1.1. Contractor periodically deploys releases of the EDP into the EDP technical environments as defined in the RFP.
 - 4.1.2. Except in cases of emergency, Contractor shall notify the NYSED at least thirty days prior to activating each Update. Notification shall include the following, at a minimum:
 - 4.1.2.1. Date of Update activation;
 - 4.1.2.2. Notes describing the Update content;
 - 4.1.2.3. Date, time, and duration of time required to deploy the Update; and
 - 4.1.2.4. Results of tests satisfactory test run of the Update in Pre-production (Staging) environment of EDP.
 - 4.1.3. Contractor shall apply continuous efforts and resources to resolve any Defect in the EDP identified by the NYSED, otherwise brought to Contractor's attention, or a Defect of which Contractor should reasonably become aware.

4.2. Maintenance Schedule

4.2.1. Scheduled Maintenance – Contractor 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. The Contractor shall provide the NYSED with advanced notice of maintenance whenever possible

4.2.2. Emergency Maintenance – Contractor may need to perform emergency maintenance, such as security patch installation or hardware replacement under Hardware Replacement Guarantee under certain circumstances. The Contractor shall provide the NYSED with notice of emergency maintenance in accordance with the Change Management as defined.

5. **Update Management** - Activities include services required to appropriately manage and document changes to the application(s) and/or any of the EDP (Hardware, Software, Hosting etc, excluding services related to implementation) components including associated costs if outside of agreed upon scope. Update management also includes services required to appropriately manage and document changes to the underlying EDP hardware and software components.

5.1. 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

5.2. 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, include production turnover and software migration control.

5.3. Platform Change – the coordinated activities with NYSED prior to any requested or required changes to the EDP and hosting platform that may affect the service-level performance of any of the EDP environments. Any changes to the baseline project plan must be managed consistent with the SOW and documented change management procedures defined during the EDP implementation.

5.4. Change Management - Contractor shall provide change management services to manage changes to the EDP that alter the existing state of the EDP System, including software, hardware, networks and facilities. Contractor shall use a standard process to communicate and implement changes, in accordance with the change management service levels summarized in the table below:

Contractor Change Management		Business impact	NYSED notification and confirmation	Example
Planned	Standard	Minor or repetitive changes considered part of the normal workflow with <i>no affect</i> on NYSED’s business	None.	Pass -word reset.

Contractor Change Management		Business impact	NYSED notification and confirmation	Example
	Minor	Small changes that have a documented and proven implementation process with <i>little impact</i> to the NYSED's business.	Contractor shall advise NYSED 48 hours in advance. Unconfirmed notification to NYSED is acceptable.	Installing patch on the application server.
	Moderate	Changes that may affect multiple applications and have a <i>broad business impact</i> .	Contractor shall advise NYSED five working days in advance. NYSED must confirm notification.	New OS or version Update, local comm.. room Update in network infrastructure.
	Major	Changes that may affect multiple applications across multiple departments, with a <i>significant impact</i> to NYSED business.	Contractor shall advise NYSED ten working days in advance. SED must confirm notification.	Replacing old information system with new.
Un-planned	Critical (After-hours)	Changes that must be performed in order to correct a faulty IT service having <i>some impact</i> on NYSED's business. Impact to business does not warrant immediate correction.	Contractor shall advise NYSED as soon as possible after knowing such a change is required. Confirmed notification is preferred.	Hung process on a server – needs to be corrected before next tape backup is scheduled.
	Emergency (Immediate)	Changes that must be performed in order to correct a faulty IT service having a <i>major impact</i> on NYSED's business. Impact to business requires immediate resolution.	Contractor shall advise NYSED after change implementation. Confirmed notification is preferred.	Virus attack on network.

6. **Monitoring and Reporting Services** - Contractor shall provide monitoring and reporting services that include the activities associated with the ongoing surveillance, tracking, problem escalation, resolution and reporting of application development problems. These problem management activities require coordination with the designated Level 1 and Level 2 help desk. This monitoring shall include, but is not limited to:

- 6.1. Monitoring the health of the application and notifying the operations team of potential issues.
- 6.2. Monitoring the connections between the different layers of the EDP System.
- 6.3. Monitoring for critical exceptions within the application.
- 6.4. Monitoring the transaction and login rates for capacity and security.
- 6.5. Monitoring the connections between the different layers of the system and the public internet.
- 6.6. The Monitoring Plan shall provide a specific list of all physical devices, hosts, ports, URLs, Web sites and other components that are required to be actively monitored.
- 6.7. 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.

On quarterly basis Contractor shall provide to the NYSED a consolidated list of major activities being performed, their status and plans for the next reporting period.

7. **Support Services.** Subject to the terms and conditions of the Agreement and all Appendices and Schedules thereto, Contractor shall provide Support Services as described herein for all components of the EDP System, including hardware and third party supplied system software chosen by Contractor. Support Services shall consist of the following:

7.1. Support Center. Standard customer care services are required to provide continued proper and effective use of the EDP by Users throughout the Term of this Agreement. The primary mechanism for delivering this service is the Support Center.

7.1.1. Support Center services are provided as follows:

7.1.1.1. The Contractor will provide Level One and Level Two support for the Data Dashboard solutions contained within the EDP and Levels One through Three support for all other elements of the EDP as per the Content Management and System Services RFP..

7.1.1.2. Support Center staff may be contacted by EDP end-users for Level One support via toll-free telephone number provided by Contractor.

7.1.1.3. Support Center staff may be contacted by Designated Representatives for third level support via toll-free telephone number provided by Contractor.

7.1.1.4. Only NYSED Designated Representatives are authorized to contact the Support Center directly.

7.1.1.5. Support Center hours of operation are to be provided between the hours of 7 a.m. and 6 p.m., Monday through Friday.

7.1.1.6. Support Center staff provides assistance in the following areas:

7.1.1.6.1. Assistance related to the use of the EDP System;

- 7.1.1.6.2. Advice on work-arounds for verified Defects;
- 7.1.1.6.3. Information on verified Defects previously identified by the NYSED and reported to Contractor; and
- 7.1.1.6.4. Advice on completion and authorization for submission of the Contractor Modification/Change Request Form to report identified Defects in the EDP System.
- 7.1.1.6.5. Contractor shall create and add appropriate documentation to the EDP help files or other mutually agreed to tools to address SED issues.

7.1.2. **Additional Support.** The Support Center also provides for E-mail Support and Web-based Support.

7.1.2.1. E-mail Support: Support Center staff may be contacted by Designated Representatives for third-level EDP Support via a specified email address.

7.1.2.2. Web-based Support: Support Center staff may be contacted by Designated Representatives for third-level EDP support by filling in a web-based form.

7.2. Escalation Procedures. All incidents shall be reported by the NYSED as follows:

7.2.1. Users record incident in the designated help desk system.

7.2.2. Designated Representatives escalate incidents to Contractor via:

7.2.2.1. Support Center;

7.2.2.2. E-mail Support; or

7.2.2.3. Web-based Support.

7.2.3. Contractor records incident and specified severity level as assigned by NYSED.

7.2.4. Contractor records incident in to Contractor's Support System with NYSED Help Desk ticket number and specified severity level as assigned by the NYSED

7.2.5. Contractor personnel shall respond to Designated Representative based on the NYSED-assigned severity level in accordance with the Service Levels herein. Contractor personnel shall resolve incidents expeditiously as expeditiously as possible, consistent with industry standards.

7.3. **Complaints.** The NYSED shall escalate to Contractor personnel manager upon unsatisfactory results not in compliance with Service Levels for any incident.

8. **Service Levels.** Contractor shall provide support via Level 3 helpdesk between the hours of 7 a.m. and 6 p.m., Monday through Friday, as set forth in the Contractor's SOW, with minimum compliance to the service levels mentioned below. Outside Normal Business Hours, Severity Level 1 and Level 2 requests must be initiated through phone support. The Initial response time requirement begins when the NYSED reports the issue to Contractor's Level 3 support. The NYSED, within its reasonable discretion, shall determine the appropriate severity level based on

the above definitions and shall convey its designation to Contractor when the issue is reported. If Contractor NYSEDs not agree with the NYSED’s designation of the severity level for any issue, it shall indicate the severity level Contractor 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 NYSED. 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.

8.1. 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 NYSED during operation of the EDP solution.

Severity Level	Title	Description	Initial Response ¹	Incident Designation ²	Problem Resolution ³
1	Emergency	Production system is halted and/or data has been corrupted. If there is no reasonable work-around available, a patch may be produced. When an acceptable workaround is provided the incident shall be downgraded to a lower priority.	05 Min ⁴ 20 Min ⁵	1 hours	4 hours
2	High	Incidents render a feature inoperable without a work-around. They do not cause the production system to be inoperative, but they disrupt the normal business operations.	10 Min ⁴ 30 Min ⁵	2 hours	24 hours
3	Medium	Incidents render a feature inoperable with acceptable work around to be used on an interim basis until incident addressed with a more effective work around and/or fix.	20 Min ⁴ 1 Hour ⁵	6 hours	5 days
4	Low	Incidents have little impact on the business and application including questions not answered in the vendor documentation and documentation errors. Incidents may be addressed in a future release.	30 Min ⁴ 1 Hour ⁵	24 hours	15 days

¹ Initial phone response from Contractor acknowledging incident and severity level to Designated SED Representatives.

² Contractor shall determine and communicate the type of problem and approach to resolution with the SED.

³ Contractor shall provide correction or a satisfactory interim workaround to the SED.

⁴ Incident reported during Normal Business Hours.

⁵ Incident reported outside Normal Business Hours.

8.2. Penalties. For those incidents described herein that are within Contractor's control (subject to SED's reasonable agreement as to whether an incident is within Contractor's control), and unless mutually agreed upon, the NYSED shall levy the following penalties upon the contractor on a monthly basis calculated from the Monthly Licensing Fee (as defined in Appendix 2 – Hosting Services] of the EDP System:

- 8.2.1. Failure to meet Problem Resolution time as listed above shall result in a 0.5%.% credit per incident.
- 8.2.2. Failure to provide Problem Resolution for any incident within thirty days shall result in a 0.3% credit per incident on a quarterly basis until such issue is resolved to satisfaction.
- 8.2.3. If Contractor fails to meet this guarantee, Contractor shall provide a credit to the SED at the applicable credit percentage set forth above, limited to those incidents within Contractors total control (subject to NYSED's reasonable agreement as to whether an incident is within Contractor's control). Credit percentages are limited to 60% credit across all credits applied to Monthly Licensing Fees, included in this Schedules and the Hosting Services schedule.
- 8.2.4. For clarity this section NYSEDs not apply to any feature request, feature enhancement, or subjective disagreement with the performance or function of the system. This section is strictly limited to the objective performance obligations of this Agreement, it attachments and schedules, and any attached, or executed SOW.