TO BE COMPLETED BY AUTHORIZED USER

RFQ Title	Grants Finance CAFE Modernization	**RFQ Number**	-	**RFQ-MM-GF-2023-10**

Authorized User Information:
NYS Education Department
89 Washington Avenue
Albany, NY 12234

Authorized User Delivery Information:
NYS Education Dept.
89 Washington Avenue
Albany, NY 12234

Special Delivery Instructions:

DESIGNATED CONTACTS

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Authorized User shall indicate if Procurement Lobbying Law/Restricted Period is in effect: ☒**Yes** ☐ **No**

Where Procurement Lobbying Law is deemed applicable by the Authorized User, by signing. Vendors (Contractors) affirms that it understands and agrees to comply with the Authorized User's policies and procedures relative to permissible contacts. Information may be accessed on the Office of General Services Procurement Lobbying Law webpage or on NYSED's Procurement Lobbying Law Policy Guidelines webpage.

QUESTIONS AND OTHER EVENTS

This RFQ is for Products from the following checked Lots as defined in Award # **22802** – Information Technology Umbrella Contract – Manufacturer Based (Statewide):

☒ **Lot 1 – Software** ☐ Lot 2 – Hardware ☒ **Lot 3 – Cloud** ☒ **Lot 4 – Implementation**

The Authorized User named above is seeking competitive quotes from the Vendors / Contractor (Manufacturer) and their Resellers (where applicable) of Information Technology Umbrella Contract – Manufacturer Based Contract(s) for the above-referenced Products. If the RFQ includes Lot 1 – Software, Lot 3 – Cloud, Lot 4 – Implementation, Vendor must prior to submitting a response to the RFQ either hold an award for Lot 1 – Software, Lot 3 – Cloud, Lot 4- Implementation, or be able to provide the services under the other Lots included in the RFQ.

Event	Date	Time
RFQ Release Date	**May 3, 2023**	N/A
Vendors' Questions Due	**May 17, 2023**	5PM EST
NYSED Answers Due	**May 31, 2023**	N/A
Vendor Bid Submission/Response Due	**June 21, 2023**	5PM EST
NYSED Evaluation	**July 20, 2023**	N/A
NYSED Contract Award Communication	**July 27, 2023**	N/A
Project Kickoff	**October 2, 2023**	N/A

LOT 1 – SOFTWARE RISK LEVEL: ☐ Low ☒ Medium ☐ High
LOT 3 – Cloud RISK LEVEL: ☐ **Low** ☒ Medium ☐ High
LOT 4 – IMPLEMENTATION RISK LEVEL: ☐ **Low** ☒ Medium ☐ High

IS THE RFQ BIDDER POOL LIMITED TO M/WBE, SB, AND SDVOB VENDORS: ☐ Yes ☒ No

BASIS FOR AWARD
☐ Lowest Price Meeting Specified Technical Requirements
☐ Lowest Price Meeting Specified Technical Requirements **and** Mandatory Pass/Fail Requirements
☒ **Best Value with Technical and Financial Score**

E-RATE ELIGIBLE ☐ Yes (E-Rate Discounts are Required) No☒

RFQ and Associated Documents Packet:

1. RFQ-MM-GF-2023-10.docx
2. Appendix L - RFQ Deliverable-Based Financial Response
3. Appendix M - Future State-To-Be RTM.xlsx (Functional and Non-Functional requirements)
4. Appendix N - As-Is Workflows and Related processes - Some Samples
5. Appendix O - Grants Finance – Deliverables Expectations
6. Appendix P - Sample GF EZspec Reports.zip
7. Appendix R - NYSED Data Privacy Addendum (DPA).docx
8. Appendix T – Cloud Security Implementation-v1
9. Appendix U - Vendor References (Previous work reference doc)

NOTE - These files/attachments can also be accessed/downloaded using the URL: https://www.nysed.gov/funding-opportunities-procurements (Recommended web browser - Chrome or Firefox, primarily). If these documents are not accessible, please send an email to RFQ

mailbox – cau@nysed.gov

The Authorized User will not be held liable for any cost incurred by the Vendor for work performed in the preparation of a response to this RFQ or for any work performed prior to the formal execution of an Authorized User Agreement. Responses to the RFQ must be received by the deadline specified above. Vendors assume all risks for timely, properly submitted deliveries. A Vendor is strongly encouraged to arrange delivery of RFQ responses before the RFQ bid submission deadline. LATE RFQ responses may be rejected. The time received for an RFQ response will be determined by the Authorized User.

Any vendors that are selected are required to comply with all NYS Security Policies and Standards available on the Office of Information Technology Services Policies website.

Any web-based information and applications developed, procured, or maintained as part of this project, shall comply with accessibility requirements of WCAG 2.0 AA or later as stated in NYS Education Department Accessibility Policy, and NYS Web Accessibility Policy.
Perform accessibility compliance testing and document results in a VPAT. An example VPAT template may be found on the Section508.gov website for VPATs.

All purchases resulting from this RFQ shall be in accordance with terms and conditions of the OGS Information Technology Umbrella Contract – Manufacturer Based Contract (Award # 22802) and any additional terms and conditions set forth in this RFQ and its Attachments.

Glossary:

Acronym / Terms	Full Form / Definition
API	Application Program Interface.
BCP	Business Continuity Planning.
BOCES	Board of Cooperative Education Services.
BRD	Business Requirement Document.
CAFE	**Ca**tegorical Aide/**Fe**deral Aide (prior name of the Grants Finance office). The CAFE system is a COBOL legacy mainframe-based system built in the late 1980's for processing grant payments in the Grants Finance office. Data in the CAFE is the book of record, but all payments are bulk loaded to SFS with multiple interfaces required for administration and reconciliation.
CAU	Contracts Administration Unit
CIA	Confidentiality, Integrity, and Availability.
COTS	Commercial-Off-The-Shelf (COTS) solution.
DATA Act	Digital Accountability and Transparency Act. The DATA Act is intended to standardize and centralize federal spending data, so that it can be aggregated, reconciled, and made public.
DR	Disaster Recovery
EZSpec	EZSpec is a Unisys software package for creating custom reports.

GF	The Grants Finance (GF) office, within NYSED, is responsible for the financial management of over $3.5 billion dollars supporting about 12,000 State and federal grants annually. The GF office administers all grant payments while other NYSED program offices are responsible for ensuring that the activities funded by the grants are planned and implemented appropriately. Grants are awarded to over 3,500 local agencies, including public school districts, charter schools, nonpublic schools, Boards of Cooperative Educational Services (BOCES), municipalities, post-secondary institutions, private not-for-profit organizations, community-based organizations, and library systems.
GREAT Act	The Grant Reporting Efficiency and Agreements Transparency (GREAT) Act is a new law signed on December 30, 2019. This law transforms federal grant reporting by directing federal agencies to modernize and improve grantee reporting.
Hybrid	Defined in this document as: (Waterfall + Agile) SDLC methodology
ITS	NYSED's internal Information Technology Services staff/office.
KPI	Key Performance Index
LEA	Local Educational Agencies.
NYSED / SED	New York State Education Department / State Education Department.
OCM	Organizational Change Management
OF	Oracle Financial. This is an Oracle database used to receive and transmit extract files to and from SFS. It also Transmits payments file with Grants Finance transactions.
PSR	Project Status Report.
RAID	Risks, Assumptions, Issues, Dependencies.
RFQ	Request for Quote.
SAAS	Software as a service (SAAS).
SEDREF	State Education Department Reference File. All contact information for districts, BOCES (Boards of Cooperative Educational Services), Consortium for Workers Education (CWE) and charter schools are maintained in the SEDREF system. Also, SEDREF maintains key institutional data like school name, address, phone, grades served, and website URL and the names and contact information for several key personnel of the institution. SEDREF Cognos reports are available to the public with nightly refreshed data. SEDREF provides certain information to SAMS and some SEDREF data can be changed via SAMS.
SFS	Statewide Financial System. SFS is an Oracle Peoplesoft enterprise resource planning (ERP) system that was built to enable the State of New York to perform its fiscal and business management tasks effectively and transparently with a single, enterprise-wide accounting and financial management system that serves a broad base of stakeholders.

Vendor	This is the designated vendor awarded under this RFQ and contracted to implement the solution for the NYSED Grants Finance Modernization Project. This may also be referred to as **Vendor, Contractor, System Implementer (SI), or Vendor / SI.**
VPAT	Voluntary Product Assessment Template. example VPAT template may be found on the Section508.gov website for VPATs.
WCAG	Web Content Accessibility Guidelines.
SAMS	State Aid Management Systems.
SDLC	Software Development Life cycle.
UGG	Uniform Grants Guidance. UGG is an authoritative set of rules and requirements for Federal awards that synthesizes and supersedes guidance from earlier OMB (Office of Management and Budget) circulars.

Table of Contents

A. SCOPE/MANDATORY REQUIREMENTS

This RFQ is being distributed to the NYS vendors to acquire the following:

To procure a Commercial-Off-The-Shelf (COTS) solution and software as a service (SAAS) vendor who will work under the supervision of NYSED Grants Finance Project manager to leverage an industry standard model with minimal customization and sufficient testing, meet set goals (see Project Goals section) of modernizing the NYSED Grants Finance mainframe system, and provide below items.

- COTS and SAAS solution implementation, hosting, and maintenance by vendor
- Deliver solution in planned releases / different modules following Agile, Waterfall, and/or Hybrid approach
- Evaluation and understanding of As-Is and To-Be systems design and requirements
- Establish reasonable milestones and timelines for project implementation
- Develop future-state architecture by leveraging industry best practices for the new Grants Finance system
- Follow appropriate project management methodologies (Agile, Waterfall, and/or Hybrid)
- Establish linkages with other internal and external SED systems
- Data clean-up & big bang or incremental migration of data
- Business Process Re-engineering (BPR)
- Organizational change management
- Stakeholder/user Training
- Establishment and execution KPIs & performance improvement plan
- Back-up and eventual sunset of the CAFE (existing legacy system)
- Vendors submitting bids must have formal authority for selling and/or reselling proffered products, and the ability to implement and support them.
- Vendors submitting bids must comply with applicable Federal and State privacy laws and by all relevant Appendixes attached to this RFQ.
- Vendors submitting bids must review Appendix M (Future State – To-Be RTM -- Functional and Non-functional) in its entirety and annotate responses in column G and column H within the worksheets (Functional & Non-Functional)

B. STATEMENT OF WORK

1.1 Project Background:

The current mainframe system used by the Grants Finance program office is approximately forty years old and was designed based on a paper submission process of fiscal documents between LEAs and NYSED. The current system and business processes do not allow for information/data to be easily available in real time or for ad-hoc requests from control agencies or within the Department. The system has limited capabilities, and the current-state IT infrastructure does not allow for modifications to be easily implemented. These challenges often result in increased payment processing times and the need for manual record keeping that is time-consuming and puts additional pressure on the administering teams.

In the current process, the Grants Management mainframe system named CAFE interacts with other SED mainframe systems such as FI, SEDREF, etc. and through schedule jobs / manual runs exchange financial data with the non-mainframe systems such as Oracle Finance (OF) and the NY State Financial System (SFS).

The procurement of a COTS (Commercial Off the Shelf) product to replace the existing legacy system, CAFE would enhance the Department's grants management capabilities from procurement to payment and performance reporting. We plan to harness modernized business practices, technologies, and available functionalities for transforming the full grant management lifecycle. This will include streamlining processes with necessary automations and establishing a clear chain of operations, roles, and responsibilities for all user groups within finance and program offices teams. This would enable reports / data to be generated in real time without the need for manual calculations or modifications. This platform would also reduce processing time within the Department and result in payments being made to LEAs in a faster and more efficient way. The needed migration from a paper-based system to a new online system will allow for Department staff and grantees to work in a seamless and productive manner whether telecommuting or on-site, which is critical to the State's successful administration of Federal and State education grants in the post-COVID era.

1.2 Project Goals:

- Transform the Grants Finance reliance on mainframe system to a modern and scalable low-code web-based solution that meets the current business needs of the GF business teams and other stakeholders.
- Electronically optimize Grant Management business processes and reduce processing times.
- The proposed system is securely hosted and managed by the vendor as a SAAS solution.
- Sunset the current mainframe application after successful implementation of the new system and data migration.

1.3 Project Objectives:

- A proper evaluation of (As-Is & To-Be) systems, processes and requirements including business process re-engineering.
- Leverage Vendor's expertise and industry standardized approach/model (Agile, waterfall, and/or hybrid), with minimal customization, sufficient testing, data clean up, data migration, and stakeholder training.
- Digitize paper-based processes into web-based application processes.
- The new system should be significantly more automated, transact paperless, ease review, save time, standardize compliance, transact real-time data, reduce data entry, and allow for information/data to be easily available for real time ad hoc requests and/or reports from our control agencies or within the Department.
- Train stakeholders
- Back-up and sunset of the CAFE mainframe system.

1.4 Foreseeable Advantages of the Proposed System

- Scalable web-based system replacing paper-driven processes.
- Advanced reporting and analytics capabilities helpful for optimal decision making.
- Seamless data transmission among SED systems and the proposed GF solution, leading to improved collaboration among GF stakeholders.
- User-specific dashboards to manage the day-to-day operations in a more organized and insightful manner, with simple and powerful navigation functionalities.
- Intuitive workflows help reduce processing times and improve effectiveness and efficiency.

1.5 Technical Environment (As-Is)

Unisys 4380 mainframe
COBOL74 and XGEN Language
Operating System: Master Control Program (MCP) Release 19.0/60.0
Database: Unisys DMSII 19.0/60.0

Total Programs
135

Database Tables
15 approximately, and SEDREF File.

Database
4GB approximately.

Screens
65 approximately.

User Groups
Online Users – Internal and External.

Reports
144 reports approximately.

Grants Volume Handled By GF
About 20-25,000 projects processed a year

1.6 Timeline

The estimated contract term for NYSED Grants Finance CAFE Modernization project **is no more than 18 months.**

1.7 General Assumptions

- Following an industry standard (Agile, Waterfall, and/or hybrid) SDLC methodology, the selected Vendor will provide all services necessary and required for the NYSED Grants Finance Modernization project in accordance with the Vendor deliverables set forth below and the contract awarded by the NYSED.
- Any constraining problems or issues faced by the vendor during contract execution shall be communicated quickly and directed to the project manager as soon as possible so that action can be taken, and issues can be avoided.
- The expected project timeline can be met, the project will be completed within the expected time, and all vendor staff will complete their respective tasks efficiently.
- All the staff provided by the Vendor have the required/necessary expert level skills for this project.
- When executing this project, there might be cases where the scope and specifications need to be altered to cater to the requirements and needs of the project.
- Business teams would be available during the project tenure for requirements gathering, testing, UAT and other necessary clarifications.
- Business teams would be available to provide the necessary guidance throughout the project.
- Business teams would provide the necessary approvals at the appropriate/defined times.

1.8 Project Deliverables

Project Deliverables may be revisited based on the initiation and planning phase discussions. Except as specifically set forth herein, the Vendor will perform the Deliverables set forth below in the **General/Common Deliverables / Artifacts / Acceptance Criteria** section, and in the **respective phase Deliverables** section:

General/Common Deliverables / Artifacts / Acceptance Criteria:

The list of artifacts in this section "**General/Common Deliverables / Artifacts / Acceptance Criteria** ", should be delivered/updated/submitted at the end of each agreed phase and if there are changes made when compared to the previous phase. As annotated, they are applicable to **two or more** phases collectively:

Please Note: Each of the respective phases following this section "**General/Common Deliverables / Artifacts / Acceptance Criteria**", may still have additional deliverables exclusive to the respective phase.

1) Publish **Requirements Document.** This includes detailed Business - Functional and Non-Functional Requirement (covering all teams – GF, LEA, SEDREF, ITS, CAU, OF, SFS, External Users – Applicants / Grantees) for online screens/forms, wireframes, Business Process Re-engineering blueprint, reports (including EZSpec reports conversion), system linkages, and dashboard/Reports templates, reports outputs – PDF, Excel, weblinks, etc., requirements of the new system. At the end of each phase, the Business – Functional and Non-Functional Requirement Document should be updated and published if there are any changes made or identified that need to be added to the requirements documentation. **This deliverable applies to Phases 1.8.2 through 1.8.14**
2) Publish updated '**Technical System Specification Document**' including technical requirements, programming languages description, configuration, architecture, API requirements, schemas, tables, structures, flows, data dictionary, mappings, environment configuration, Servers, Disk Storage, Routers, Load Balancers, Infrastructure Physical/Logical Configuration, Entity Relationship Diagrams, Network, Operations, Security, SSO, Access Control Management and Support Details, etc. This document should also include the Data Migration plan. At the end of each phase, the Technical System Specification Document should be updated and published if there are any changes. **This deliverable applies to Phases 1.8.2 through 1.8.14.**
3) **Post-Production Checks and Balances Document** including high-level actions / checks for all stakeholders – GF PO | CAU | LEA | ITS | Treasury | SFS | OF, etc. including validations for end-to-end grants workflow, Prod Reports and their data outputs, user groups permissions and access, checking record counts and sums, range/format checks, consistency checks, data integrity checks, data presence and length checks, MS Excel-based checks, checks on user dashboards, linkages between GF system and other systems in all tiers, ensuring APIs are working as expected, etc. **This deliverable applies to Phases 1.8.11** and **1.8.12.**
4) Publish **Stakeholder Register & Communications Management Plan**, and subsequent updates where relevant. **This deliverable applies to all Phases 1.8.1 through 1.8.14.**
5) Publish a **Project/Work Plan** with element-level timeline and subsequent updates where relevant if there are any changes to the previous submission. This should include Reports and Dashboards Module deployment for phase 1.8.7-Reports dashboards & performance reporting. This should include a release cycle for each module for Phase 1.8.9-UAT preparation, and any changes made over the course of the project. **This deliverable applies to Phases: 1.8.2, 1.8.3, 1.8.7, 1.8.9, 1.8.10, 1.8.12, and 1.8.13.**
6) Publish **Weekly Project Status Report (PSR)** along with **Project Plan** (MSP and PDF version), and participation in weekly meetings and ad-hoc meetings as needed. **This deliverable applies to all Phases: 1.8.1 through 1.8.14.**
7) Publish all Agile, waterfall, and/or hybrid methodology artifacts at the end of the phase – Backlogs, Epics, Stories, Features, Sequence Flows, Charts, Wireframes, etc. **This deliverable applies to all Phases: 1.8.1 through 1.8.14.**
8) Publish Monthly **Project Team Calendar. This deliverable applies to all Phases: 1.8.1 through 1.8.14.**
9) Publish **Risks, Assumptions, Issues, Dependencies (RAID) Log & Decisions Log. This deliverable applies to all Phases: 1.8.1 through 1.8.14**.

10) Publish Revised Vendor's **Personnel Specific Role and Responsibilities Document**, if there are any changes to the most recent previous submission. **This deliverable applies to Phases: 1.8.2 through 1.8.7.**
11) Publish **Vendor Fallback Plan Document** (same for configuration, business processes, reports, dashboards, data migration, including Disaster Recovery (DR) / Business Continuity Planning (BCP)). **This deliverable applies to Phases: 1.8.2 through 1.8.11, and phase 1.8.13.**
12) Publish **Lessons Learned / Retrospective Document**, and subsequent updates if there are any changes to the most recent previous submission. **This deliverable applies to all Phases: 1.8.1 through 1.8.14**
13) Publish the **Future Development Document**. Documents should include functionalities that were not included in the current version. **This deliverable applies to Phases: 1.8.10 through 1.8.14.**
14) **Defects Tracker Document** and relevant updates where needed – track bugs and report them along with the weekly PSR. **This deliverable applies to Phases: 1.8.10 through 1.8.13.**
15) Update training toolkits and help guides if any changes need to be made to the previous submissions**. This deliverable applies to Phases: 1.8.12, and 1.8.13.**
16) Ensure Any documents created or delivered by the vendor is compliant with NYSED Web Accessibility Policy, including at least to the level of WCAG 2.0 AA and WAI-ARIA 1.0 or later. **This deliverable applies to Phases 1.8.1 through 1.8.14**
17) Submit a VPAT to the agency PM, in order to document accessibility compliance for any web-based system implemented for this project. **This deliverable applies to Phases 1.8.1 through 1.8.14**

Deliverable#	**Deliverable Details**
1.8.1 Initiation & Planning	Core Activities Include: • Establishing Project governance • Developing Communication planning • Establishing scope • Engaging in Stakeholder expectations management • Executing Kick-off Deliverables / Artifacts / Acceptance Criteria: 1) Publish Project Scope Document including SDLC methodology / approach, architecture, high-level design, etc. 2) Publish Project High-level Milestones, along with modules release dates, & Project Plan (MSP and PDF version). 3) Publish Vendor Platform Security Document including: • Adhering to the CIA triad, complete description of the vendor security controls, user permissions, and architecture for SED assets protection. • Provide security assessments and certifications vendor has gone through and are active. 4) Additional deliverables can be found in section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** **Note**: Document templates for PSR, Team Calendar, Communications Plan, RAID, Decision Log, and Stakeholder Register will be provided by NYSED.

1.8.2 Requirements Gathering	Core Activities Include: High-level: • Reviewing current state processes, system linkages/handshakes, reports, data, data structures, and database. • Reviewing this RFQ and all attached **Appendix (L through U), processes** and workflows, system linkages/handshakes, reports, data, data structures, database, context diagrams and relevant files, and formulate / generate business process re-engineering requirements/design. • Developing future state application screens, creating wireframes, mockups, and data flow diagrams. • Documenting the requirements of grant management forms submitted for FS-10, FS-10A, FS-10F, FS-25, payments, fund accounting, reconciliation, and reporting. These include: ▪ Streamlined business processes ▪ Data requirements ▪ Future state technical requirements ▪ Future state architectural flows • Setting up all SDLC database tiers and necessary linkages - Dev, Test, UAT, Staging/Training and Prod. • Building a Requirements Traceability Matrix (RTM) structure using Jira/Confluence, SharePoint, MS tools, etc. • Implementing and maintaining the cloud-based solution. • Engaging in High-level overview of the support and service levels after solution is implemented. • Developing requirements for Security architecture and assurance for the proprietary and non-proprietary software and migration tools utilized by the Vendor for performing the migrations. • Securing all the stored data • Remaining up to date with compliance of Federal and State regulations • Identifying any red flags in the system • Easily and securely transferring necessary data • Reducing and eliminating any fraudulent activity • Controlling, monitoring, and limiting user access • Working closely to align with policy and compliance, as there is a need for an enterprise solution to accept digital signatures. • User Authentication & Access – Maintaining current user authentication process is encrypted in SSL protocol. • Establishing provisions for enterprise virus scanning of all documents uploaded into any of the data collection applications. • Adhering to the CIA triad, complete description of the security architecture of the environment where the data and source code will be extracted, transit medium and transformed, before loading on to the database. • Providing the security assessments and certifications the Vendor proprietary migration tools have gone through, if any. Detailed: To eliminate Grants Finance's reliance on the legacy mainframe system, CAFE and migrate to a modern/paperless Grants Management System. The vendor's effort will include: • Evaluating existing workflows, functional and non-functional requirements, systems designs and associated documents, and then document process-flows. Project/Work plan development interacting with Grants Finance IT team, business users and other stakeholders. • Extracting requirements from the mainframe system source code, data, reports, Grants Finance system interfaces and business processes, context diagrams, etc.

	• Identifying and clearly recording changes to be made in the current environments (if any) before configuring the new platform. List the interdependencies and environmental differences that need to be addressed for the new system so that necessary data/reports could be migrated without any data/procedures lost in transition. • Validating the existing system model that contains the source code, tables, and reports, etc. so that necessary changes are identified and implemented before transition into the new environment. • Establishing requirements for digitizing the paper forms and allowing LEAs and Program Offices to enter data into online forms. • ‘Determining and capturing record retention requirements. • Defining and documenting the business rules and requirements for the various alerts, reminders, notification, error messages on each screen/form. • Establishing requirements to expedite the communication among stakeholder groups that are currently dependent on physical mail correspondence such as the Grant Award Notifications. • Establishing requirements for improving collaboration, communication, and workflow within the grant contract process. • Establishing requirements to improve reporting capabilities that allow stakeholders to query and interact with data in real time. • Defining and documenting requirements so that the system has advanced and comprehensive requirements and approach for data cleanup as part of migration. • Documenting the current system gaps and limitations that may constrain functionalities existing in the new system. Also record unusable functionalities in the new system, due to new environment gaps and limitations. • Documenting different handshakes and manual/automated validations required when forms are getting processed from one department to other. • Documenting user level/group roles (GF, ITS, SFS, CAU, etc.) & appropriate permissions required to access these forms, with administrative privileges to identified contacts. • Establishing a notifications/alerts/reminders engine, where respective downstream departments can be notified every time that the form is moving, an action is taken/pending, a step is reaching its threshold, etc. • Listing the actions and responsibilities to be shared between the vendor and NYSED staff. • Evaluating current user authentication and authorization procedures and recommending new methods if current ones cannot be implemented in the new system. • Continuing or enhancing the current directional data flow processes for the new environment. • Establishing & executing OCM plan and requirements. ▪ Stakeholders involved in this change need to be informed about how the new grants management software will affect them and explain when those changes are to occur. ▪ Through a communication plan, communicate early and often to stakeholders, and decide the best channel of communication, document key messages, and map communications around key implementation milestones. The following depicts the high-level components included in the recommended OCM methodology. The components include: ▪ **Planning and Managing** the OCM effort. ▪ **Aligning and Engaging** sponsors, stakeholders, project team, and staff. ▪ **Assessing and preparing** for change impacts, change readiness, and resistance management. ▪ **Translating and communicating** with internal and external audiences. ▪ **Training and Transitioning** to the new business processes and technical solutions.

	• Providing a complete training strategy for administrators, internal users, and external stakeholders/users. The training must be closely aligned with the OCM effort so that messages, training, and knowledge transfer is completed in a timely manner and all stakeholders are well trained to confidently operate in the new system. • Establishing requirements and framework for Business Process Re-engineering (BPR). Analyze current business processes, identify/recommend improvements, plan/design future state processes, develop and implement future state changes. • In partnership with NYSED-GF Business Analyst, vendor's staff will be designing wireframes and sequence flows. • Requiring database tables & stored procedures that are being mapped to API for data transmission: ▪ UI fields mapped to API fields. ▪ List of API's invoked on each application page/form ▪ Data flows from one application layer to the next layer. • Providing illustrated application screens, fields & API mapping documents as a part of artifacts of the requirements gathering phase. • Providing requirements which should be captured (using Jira/Confluence, SharePoint, MS tools, etc.) in a manner that they could be traced and tracked using Requirements Traceability Matrix (RTM) and validated at the final UAT stage. • Providing comprehensive documentation capturing the security architecture for data transmission when opting for API approach among systems. • Providing mechanism for SED staff to be able to configure, receive, and send notifications, reminders, and alerts, for the various workflows, application statuses, types of grants, etc. • Testing of APIs & security layers successfully using industry standard tools such as Postman, and share results with SED, before mapping them to Interfaces. <u>Deliverables / Artifacts / Acceptance Criteria:</u> 1) Publish approved revised SOW if there are any changes to the previous submission. 2) Publish preliminary **High-level Service Level Agreement (SLA)** document. 3) OCM plan. 4) Additional deliverables can be found in section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** <u>Assumptions and Constraints</u>: • BRD produced during this phase defines solution requirements and exceptions. • NYSED teams will be available to provide the necessary input.
1.8.3 Product Development & Proof of Concept (POC)	<u>Core Activities Include</u>: • Setting up the NYSED servers and environments to have proper version control on the source code and ensure that development (Alpha), configuration (Alpha), testing (Beta) and UAT (General Audience) of the application has no interference due to version conflicts. • Implementing any changes required in current and post-migration environments, in partnership with NYSED staff, • Working directly with NYSED IT to configure necessary authentication connectivity and data flows within stakeholder groups/users and other NYSED systems. • Implementing an approach that drives substantial user training and adoption. • Implementing a system that conforms to established audit/compliance requirements and relevant federal, state guidelines and requirements, including Data Act, GREAT Act, UGG, etc.

	• Making necessary changes to directories and the configuration to point to the new platform. • Implementing an approach that drives industry and enterprise level standards and best practices where feasible. • Implementing a system that is configurable to meet the specific needs of NYSED Grants Finance Management office including registration, applications review, audits, reports management, awards processing, amendments, analytics, payments request, closures, security, communications, and change management. • Proceeding in a phased and iterative manner so that we could simultaneously build and test the application components and involve program office teams for periodic feedback and changes. • Configuring necessary printing options and perform necessary modifications to the reports and folder structure, as necessary for report outputs. • Collaborating with GF on building the application security and user access management. • Executing successful software implementation for all grant management modules and sufficient unit testing. • Executing successful creation of reports, dashboards, FileNet/SharePoint document storage (if any), etc. • Implementing system that meets supplied requirements and stated goals. • Establishing linkages with the other SED systems. • Executing development Proof of Concept (POC) to full functionalities and features as per Business and Technical requirements. Deliverables / Artifacts / Acceptance Criteria: 1) Vendor shall develop and demonstrate a working POC solution incorporating the following business processes: ▪ Transform Grants Finance management process into Digitalized process by enhancing internal technical stack. ▪ Grants Management enhancing capabilities for improving processing times for LEA. ▪ Replacing legacy Mainframe services with a new SAAS on cloud platform. ▪ Develop Technical Architecture by building API for Data transformation and Data migration. 2) Vendors shall incorporate the changes to the POC as per input received from NYSED Business and Technical teams. 3) POC will be deemed complete when SED Business and Technical teams provide the Sign-off. 4) Develop and deliver fully functional To-Be solution (Full working Product) meeting all SED requirements specified in RFQ Document – Milestone. 5) Additional deliverables can be found in section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** Assumptions and Constraints: • Vendors must ensure all necessary documents will be kept up to date for the changes made in all environments. • NYSED teams will be available to provide the necessary input.
1.8.4 Integration & Interfaces	Core Activities Include: • Documenting requirements for existing system interfaces to be re-established in the new environment. These interfaces include but not limited to: 1. OF (Oracle Financial) system 2. SEDREF system 3. SFS system • Establishing, testing, and configuring integrations to support the Grants Finance management system in the new platform. • Defining and documenting process-flows and step-by-step approach for transferring the linkages / interfaces to the new platform.

	• Providing Wireframes and Fields incorporated in each screen and verbiage used for these fields. • Providing API's (Request & Responses structure) that are going to be mapped to field values on these forms. • Understanding and analyzing the code logic / business processes, then development and proper organization of the legacy system work and process flows, SIPOC (Suppliers, Inputs, Process, Outputs, Customers) diagrams to be useful for integrations. • Establishing provisions for current data transmission formats among systems to be followed in the new system. • Determining Unique identifiers for managing these system-to-system data transmissions. • Establishing and executing provisions for NYSED Grants Finance system integrations to be deployed and ready for UAT. Deliverables / Artifacts / Acceptance Criteria: 1) Deliver APIs that satisfy the SED business & technical needs to exchange data with internal SED applications and any external systems – Milestone 2) Additional deliverables can be found in section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** Assumptions and Constraints: • The out-of-the-box integrations and add-ons from new environment, etc. will be configured to handle data between/within applications. • All necessary documents will be kept up to date for these system linkages. • NYSED teams will be available to provide the necessary input.

1.8.5 Testing	Core Activities Include:
	• Comprehensive testing of the system, reports, database structures, interfaces, and data transmission. These can be considered as testing sub-phases/components.
	• Working with NYSED staff and developing/executing functional and regression testing scripts for code, features, functionalities, process flows, database, data transmission, reports, dashboards, APIs, system integrations, user groups access, system performance, etc.
	• Ensuring the data transmission is swift and accurate across multiple defined systems.
	• Testing data transmission between various components, business processes and systems.
	• Performing integration testing for the interfaces and helping with SED testing efforts.
	• Testing to ensure the system conforms to all SED, audit, compliance, and security requirements.
	• Ensuring the new system must comply with all the audits conducted at the Federal, State, and local level.
	• Performing parallel testing: Before go-live, a sample of records are entered into both CAFE and the new system and generate the exact same results for data, reports, and validating other calculations.
	• Testing to ensure the new system leverages SED approved electronic signature functionality.
	• Providing a testing plan that includes:
	  ▪ Function and feature testing: They should meet business needs.
	  ▪ System testing: All the components should work cohesively as expected.
	  ▪ Performance & load testing: System should perform optimally especially during the peak load of seasonal grants activities.
	  ▪ Security testing: System conforms to all SED security requirements.
	  ▪ Integration testing: Linkages between the new system and other SED systems are established as required.

	▪ Parallel testing: SED users should be able to conduct parallel testing in the test tier so that a sample of records are entered into both the current CAFE system and the new system to generate and compare the results for accuracy. ▪ API testing: Testing of APIs & security layers using industry standard tools such as Postman, and share results with SED, before mapping them to Interfaces. ▪ UI - API - DB testing: Testing should include data entry, transmission with/without APIs, storage in the databases, respective tables, etc. Users should have the ability to crosscheck and reverse engineer if the submitted data is accurately received in the right database tables. Also, check any data is dropped or corrupted during transit. • Vendor in collaboration with GF team to engage in developing Test cases / Use cases document prior to component development to understand the impacts. • Engaging in successful completion of functional and feature testing, system testing, performance testing, security testing, integration testing, regressions, and parallel testing. • Engaging in successful testing of reports, dashboards, FileNet/SharePoint document storage (if any), etc. • Engaging in successful testing in QA (Quality Assurance) and ready for user acceptance testing (UAT). • Ensuring Interface and environment are ready for UAT, including UI, database, and API. **Planning for UAT & Business/end-users Trainings Development:** • Developing a UAT plan • Ensuring the appropriate environment and data is ready for SED users (internal & external) • Finalizing testing team members • Establishing UAT success criteria • Defining and communicating process for bugs resolution, when identified during UAT • Making the agreed reports ready for SED staff to test in UAT tier <u>Deliverables / Artifacts / Acceptance Criteria:</u> 1) Publish Test Plan including test scripts & results for all types of testing. The plan should include system testing scripts, reports, dashboards, database, and views testing scripts also. 2) Periodic testing progress reporting via email (including publishing the defects tracker). 3) Periodically publish Testing Defects Log/Tracker (Shared Responsibility b/w NYSED and SI) 4) Successful testing of functional, regression, system, End-to-End testing, modules, reports, dashboards, data migration, etc. in the QA environment. - Milestone. 5) Code Readiness For UAT, Security & Performance Testing - Ensure the code is ready for User Acceptance Testing, InfoSec testing, Performance testing - Milestone. 6) Communicate results via email for successful testing of modules, reports, dashboards, data migration, etc. 7) Completion of all tests (except UAT) – Milestone. 8) Additional deliverables can be found in section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** <u>Assumptions and Constraints:</u> • All necessary documents will be kept up to date for the changes made in Development and Test environments for current and new platforms.

	• NYSED teams will be available to provide the necessary input.
1.8.6 Data Cleanup & Migration, and Archival	<u>Core Activities Include:</u> • Approximate Data Migration – 5GB • Developing and documenting step-by-step approach / ETL processes for data migration • Communicating list of interdependencies that need to be addressed before migration. • Establishing secure infrastructure for Grants Finance application, data, and reports, in consultation with vendor. • Developing relevant data migration template for NYSED. • Leading/driving/executing data cleanup effort as part of data migration, in collaboration with NYSED IT. • Collaborating with NYSED to develop the necessary stored procedures and rules to transfer data from legacy to the new system and resolve identified differences. • Extracting the full data set from CAFE, modifying the records so they are complete and accurate and then loading them into the new system, or propose a more feasible approach for consideration by NYSED. • The vendor will need to collaborate with Grants Finance in establishing a clear, agreed upon standard for when a record from CAFE is accurate and complete. Each field in each record in CAFE will need to be aligned with a corresponding field and record in the new system. It is possible that some records in CAFE are incomplete and will need correction before moving to the new system. The vendor will need to develop a strategy for identifying non-conforming records and flagging them for correction by a member of the Grants Finance staff and determine if handwritten notes from the paper file may be entered into the new system record for a more complete history. • Collaborating with NYSED to develop the necessary procedures and rules to access data from current mainframe to the new system and resolve identified differences. • The vendor would be investing the needed time for addressing any unexpected issues or errors during the migration of source and data, including additional effort needed to rectify the errors during pre-migration, migration, and post-production period. • The Vendor's Plan must be including measures on how they would achieve the access limitations as per the 'Least Privilege' principle and protect the data from unlawful disclosure or access. • Executing a successful data migration to the new database. **Data Validation:** • Conducting data validation exercise to ensure every record and every line of code is accurately migrated to the appropriate location. • Developing ability for NYSED staff to perform comparative validation tests on old database versus new database simultaneously. • Describing the reconciliation methods and validation strategies they would employ to ensure all the data is migrated accurately. • sharing the rules and record count statistics for establishing the record counts. **Data Archival, Retention & Disposal:** • Assisting in planning and executing the data archival processes. • Listing the requirements and parameters for making the data ready for archival, retention and disposal subsequently. • The vendor, in collaboration with Grants Finance, will need to establish rules and standards for what archived and active CAFE records will be migrated.

	• The vendor, in collaboration with Grants Finance, will need to determine if all available records need to be extracted to provide historical trend analysis in the new system, or just the active records. • Executing successful functional testing, non-functional testing, regressions for data archival, retention, and disposal before UAT. Deliverables / Artifacts / Acceptance Criteria: 1) **Data Migration Document** - Develop and document step-by-step approach / ETL (Extract, Transfer and Load) processes for data migration, and develop and lead data clean-up activities in collaboration with the SED teams. Also Collaborate with SED to develop the necessary stored procedures and rules to transfer data from legacy to the new system and resolve identified differences. 2) Allow business and IT Teams to inspect the following and provide sign-off confirming that all required data has been migrated successfully in respective tiers - Milestone. a. Count of Datasets b. Count of total records per Table c. Data Quality/Accuracy d. Data Structure and Indexes e. Database Performance 3) Additional deliverables can be found in the section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** Assumptions and Constraints: • The vendor shall migrate all needed records from the old databases, invest needed time for cleanup, and resolving any issues discovered during and post migration, and create the appropriate destination locations in the new environment repository. • NYSED teams will be available to provide the necessary input.
1.8.7 Reports, Dashboards and Performance Tracking	Core Activities Include: • The vendor should be gathering the reporting and dashboard requirements. • The vendor should be creating/converting the identified EZSpec reports in the new reports platform referring to DMSII database tables used for EZSpec reports creation. • Ensuring System should have reports builder, dashboards, and multiple screens for real-time performance data about the value of funds, number of grants, and duration of key processes such as receipt to approval. • Completing the set-up and necessary configurations, working along with NYSED Business and IT teams to implement reporting tool configuration, reports (convert existing EZSpec & new reports), dashboards, business rules for the different tables, views, data structures, jobs, forms, libraries, data dictionaries, metadata etc. The system should be able to handle all the functionalities current system is offering. • Defining and documenting the business rules and requirements for the various alerts, reminders, notification, and error messages while generating reports. • Ensuring the reporting and dashboard tool should be scalable and SED staff should be able to make small to medium changes to the reports, dashboard, and other configurations, as needed. • Assessing if we need to set up EOM/other print software to print all the necessary reports. Recommend best practices to share the prints with the internal SED and external audience. • Automating and configuring the distribution list for all reports possible.

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• Establishing provision for SED staff to be able to view the various stages and types of grant application. Conduct necessary analysis including (but not limited) to application aging, status checks, range reports, renewals, types of grants, performance tracking, etc.
• Establishing provision for SED staff to be able to configure, receive, and send notifications, reminders, and alerts when reports are due, and these should be easily customizable for SED staff to make changes.
• Communicating list of interdependencies that need to be addressed before reports migration.
• Developing Key Performance Indicators (KPIs) in collaboration with NYSED staff. Sample KPI could include but not limited to:
o Number of Projects by Type (Allocational, Regular, Grant Contracts)
o Number of Fund Sources or Grant Initiatives
o Cycle Time of a Project
o Total Funds Expended per day/quarter/year
o Total Carryover Balance by project per school year
o Outstanding Encumbrance by project or fund source
o Types of statuses and turnaround/aging for the various stages of grants.
• Vendor should be investing the needed time for addressing any unexpected issues or errors during the report module configuration, reports, and dashboards creation, including additional effort needed to rectify the errors during testing, go live, and post-production periods.
• Ensuring all data, in accordance with Appendix R, whether ‘in-transit’ or ‘at- rest’ must be encrypted during the project.
• The vendor must be taking necessary measures on how they would achieve the access limitations as per the ‘Least Privilege’ principle and protect the data from unlawful disclosure or access.
• Vendor must be complying with applicable Federal and State privacy laws and abide by Appendix R, and any relevant Appendixes.

<u>Deliverables / Artifacts / Acceptance Criteria:</u>
1) All reports, views, dashboards, and printing options are tested successfully and deployed in UAT – Milestone.
2) Defects Tracker Document – track bugs and report them along with the weekly PSR.
3) Periodic reporting of the test cases, defects/bugs identified, resolved, status of unresolved, etc. for the reports, dashboards, alerts, reminders, notifications, error messages.
4) Additional deliverables can be found in the section - General/Common Deliverables / Artifacts / Acceptance Criteria.

<u>Assumptions and Constraints:</u>
• All existing reports can be extracted from the new platform and the new platform will be scalable to integrate with additional reporting tools.
• NYSED teams will be available to provide the necessary input.
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<td>1.8.8 Training</td>
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<u>Core Activities include:</u>
• Developing a training plan for Training, Knowledge Transfer, and Help Documentation
• Vendor should be providing training - Work with NYSED Business and IT teams to plan training efforts for the NYSED staff, trainers, business users and external system users.
• Collaborating with NYSED to mutually determine Online/on-site training calendar
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	• Delivering of updated GF system-specific help guides and toolkits for creation, usage and maintenance of Reports and Dashboards. • Training all teams to navigate the new Grants Finance Management System. Create experts within SED through 'Train the trainer' program. • Training necessary teams for system navigation, reports, dashboards creation, etc. based on their security/user group access. • Training of GF program/business staff on proper procedures for reports creation, usage and maintenance, dashboard creation, usage, and maintenance, and building ad-hoc reports using data sources, metadata, and respective report builder tool. • Ensuring submission of support hours report during Post-Training Support period. • Training NYSED ITS development team and administrators on the solution developed and how to manage and support it. • Providing documentation for the administration and set-up of the environment and training documentation for the development team. These activities could be concurrently completed during the UAT phase. <u>Deliverables / Artifacts / Acceptance Criteria:</u> 1) A Training Plan including training dates, methodology, mediums, storage location of training content. 2) Successful delivery of Training Content for all identified staff. This may include Help Guides/Tool Kits, Training Videos, Webinars, Instructor-led Training for all identified staff - Milestone. 3) Email confirmation from SED for completion and delivery of training for all teams for system navigation. If any further training needs are identified, those should also be met by the vendor. 4) Successful delivery of training utilizing instructor-led webinar sessions, as per groups pre-determined by Grants Finance and IT Teams. Delivery of training to all stakeholders to navigate the new Grants Finance Management System. Training of Grants Finance, ITS staff, and relevant stakeholders on proper procedures for system navigation, reports creation, usage and maintenance, dashboard creation, and building ad-hoc reports using data sources, metadata, and respective report builder tool, based on their security/user group access – Milestone. 5) Email confirmation from SED for completion and handover of training toolkits / SOPs / Help guides /AV files repository access. If any further training needs are identified, those should also be met by the vendor. 6) Successful delivery of updated Grants Finance Management system-specific help guides and toolkits for creation, usage and maintenance of system, reports, and dashboards. This includes documentation for the administration, set-up of the environment/s, and training documentation for the Grants Finance & SED IT Administrators, Developers. This also includes guidance for the gaps identified during training. 7) **Create experts (process champions) within SED through 'Train the trainer' program – Milestone** 8) Email confirmation from SED for completion and delivery of newly created reports or converted from EZSpec, including training, and mentoring of SED staff on report creation/conversion, testing and maintenance. If any further training needs are identified, those should also be met by the vendor. 9) Email confirmation from SED for completion and delivery of training for dashboards creation, testing and maintenance. If any further training needs are identified, those should also be met by the vendor. 10) Additional deliverables can be found in the section **- General/Common Deliverables / Artifacts / Acceptance Criteria.**
1.8.9 UAT Preparation	<u>Core Activities Include:</u>

	• Engaging in UAT planning for system, data, reports, user UI/dashboards, integrations with other systems, alerts, triggers/notifications, etc. • Providing UAT Test Cases with Expected Results for Reports and Dashboards Testing • Working with NYSED to develop test scripts for UAT that map to the defined acceptance criteria. • The vendor should be providing training and test scripts to the users to perform UAT. • Ensuring Readiness of help guides to perform the UAT. <u>Deliverables / Artifacts / Acceptance Criteria:</u> 1) Vendor to develop a UAT plan - Test Cases for each role, Data, Success criteria, Defect tracker, etc., UAT Cadence plan including the test scripts, UAT templates, different releases information, itinerary of the modules to be tested, milestones, etc., 2) Vendor to develop training material and user guides for conducting UAT. 3) Successful set up of the staging environment for UAT with the latest version of the code – Milestone. 4) Vendor to ensure all functionalities are ready for UAT execution – Milestone. 5) Additional deliverables can be found in the section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** <u>Assumptions and Constraints:</u> • SED staff will be available to provide the necessary input and conduct UAT as per the UAT plan.
1.8.10 User Acceptance Testing (UAT)	<u>Core Activities Include:</u> • Administering UAT execution for system, data, reports, user UI/dashboards, integrations with other systems, alerts, triggers/notifications, etc. • Ensuring UAT by NYSED IT staff and end-users using the test scripts. • Remediating any issues discovered during NYSED until acceptance criteria are satisfied. • Ensuring Grants Finance users should be able to complete the testing for all workflows based on the new/modified system requirements. • Validating all requirements against the Requirements Traceability Matrix (RTM). • The vendor should be incorporating any approved changes identified during UAT. For major SED identified changes that cannot be implemented in the current project, should be documented in the **Future Development Document.** <u>Deliverables / Artifacts / Acceptance Criteria:</u> 1) UAT Cadence plan including the test scripts, UAT templates, different releases information, itinerary of the modules to be tested, milestones, etc. 2) Periodic reporting of the UAT test cases, defects/bugs identified, resolved, status of unresolved, etc. 3) Successful completion of UAT for system, UI, data, reports, user UI/dashboards, integrations with other systems, alerts, triggers/notifications, etc. – Milestone. 4) SED confirmation that system exactly matches with the approved requirements, including any changes made during all phases. 5) SED confirmation that reports exactly match the original EZSpec reports requirements including any changes made during all phases.

	6) SED confirms that dashboards exactly meet the individual user and group-specific dashboard requirements gathered including any changes made during all phases. 7) Complete solution approval from NYSED for promotion to production. 8) Additional deliverables can be found in the section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** Assumptions and Constraints: • NYSED staff will be available for planned UAT.
1.8.11 Pre-Production - Business Continuity Planning, Disaster Recovery Planning, Pre-production Checks and Balances	Core Activities Include: • Ensuring due diligence for activities completion and performing all checks and balances before going live. Discuss if there needs to be a blackout period for data migration and post-prod checks. • Administering advance failover planning to handle issues, showstopper scenarios and challenges that could occur during and after the system and data migration to production tier. • Source Code and Data Backups - Planning and communicating information around backups' itinerary for source code and database to the NYSED. Full database backups and incremental backups of the source code and data to be secured to avoid any instance of data and/or code loss. • Providing Code and data backup recommendations for NYSED before and during migration. • Engaging with all SED infrastructure teams – Server Support Unit, Web Unit, Database Unit, InfoSec, Privacy, PMO, business teams, IT teams, Infrastructure Support team, etc. to get a green signal to promote the code to Prod. • Listing the actions and steps for all teams to perform pre-prod validations and checks on the system, reports, interfaces, and database. • Creating a daily status update mechanism for Go Live and Day-2 activities and developing a release plan. • Developing a post-implementation support mechanism and service level agreement to support the application. • The vendor should be incorporating any approved changes identified during UAT. Major SED-identified changes that cannot be implemented in the current project should be documented in the Future Development Document. Deliverables / Artifacts / Acceptance Criteria: 1) Publish the **Pre-prod Playbook / Minute-by-Minute (MBM) Document** - Pre-production Checklist/Playbook with clear responsibilities, escalation procedures, event itinerary, etc. for the cut-over and Go Live. This includes pre-production checks and balances such as high-level system checks for all SED teams and relevant stakeholders – PO, IT, CAU, external users, etc., validations for pre-prod reports and their data outputs, checking record counts and sums, range/format checks, consistency checks, data integrity checks, data presence and length checks, MS Excel-based checks, checks on user dashboards, linkages among systems and their databases in all tiers, ensuring ETL processes are working as expected, etc. 2) Email confirmation that necessary backups for system code, data, reports, and dashboards are taken in all tiers. 3) SED sign-off for completion of pre-production validations, checks and balances. This Sign-off is for Go-Live. – Milestone. 4) Retention of migration logs 5) Publish Detailed **Business Requirements Document** if there are any changes to the most recent previous submission. 6) Additional deliverables can be found in the section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** Assumptions and Constraints:

	• NYSED teams will be available to provide the necessary input.
1.8.12 Go-Live & 2-Weeks Monitoring	Core Activities Include: • Completing all the steps for code and data validations and promotion to prod. • Promoting solutions to production. • Providing On-call support during 2 weeks of hyper-care. • Remediating any post-implementation issues, as necessary. • Validating and verifying the source code and data migration after deployment. • End-user / Customer Impact – Ensuring There must be minimal service disruption for the end-users due to this platform migration. Work with NYSED ITS staff to communicate the list of changes that would impact on the business users. • Ensuring that all deliverables meet technical and business standards. • The vendor should be incorporating any approved changes identified during UAT. For major SED identified changes that cannot be implemented in the current project, should be documented in the Future Development Document. Deliverables / Artifacts / Acceptance Criteria: 1) Go Live email communication stating that GF solution, reports, dashboards, and linkages with other systems are validated and fully functional. 2) For 2-weeks, daily reporting of post implementation activities including issues/fixes, discoveries, and progress. 3) SED sign-off on successful deployment of Grants Management solution, complete and accurate migration of data. This Sign off is for completion of Go-Live – Milestone. 4) Publish **Updated Fallback Plan** (same for source code migration, data migration, system linkages, reports, and integrations) – This should include disaster recovery, BCP and plan of action in case of any breaches. 5) Completion of any additional training for NYSED Grants Finance, ITS, and end-users. – Milestone 6) Additional deliverables can be found in the section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** Assumptions and Constraints: • Vendor will continue to support the solution for eight weeks while transitioning support responsibilities to the NYSED Grants Finance & ITS Support Team. • Vendor will be available to provide any assistance NYSED may need for additional training. • Training will occur throughout this project as the Vendor and NYSED teams collaborate with each other. • NYSED teams will be available to provide the necessary input.
1.8.13 Post - Implementation	Core activities during the 6 weeks include:

Support (6 weeks)	• Providing post implementation support once NYSED establishes the timeline (6 weeks approximately, and support window SLAs (Service Level Agreement). • Providing on-call support for 6 weeks during post implementation support. • Providing recommendations for the modern tools and technologies (with their purpose) to be utilized by NYSED post migration for further optimizing the grants management solution, reporting, analytics, and decision-making. • End-user / Customer Impact – Ensuring there must be minimal service disruption for the end-users due to this platform migration. Work with NYSED ITS staff to communicate the list of changes that would impact on the business users. • Ensuring that all deliverables meet technical and business standards. • Documenting positive and negative feedback during the post-prod interactions with stakeholders. Could be included in the future development document. • The vendor should be incorporating any approved changes identified during UAT. Major SED identified changes that cannot be implemented in the current project should be documented in the Future Development Document. Deliverables / Artifacts / Acceptance Criteria: 1) Fix prod issues, track them through the **Defects Tracker Document.** 2) In partnership with SED staff, implement any changes required in post-migration environments. 3) For **6-weeks**, daily reporting of post implementation activities including issues/fixes, discoveries, and progress. 4) Completion of any additional training for NYSED Grants Finance, ITS, and end-users. 5) Additional deliverables can be found in the section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** Assumptions and Constraints: • NYSED teams will be available to provide the necessary input.
1.8.14 Closing	Core activities include: • Signing-off of all deliverables deemed successfully completed by SED. • Updating SLA agreements. • Providing revised/finalized system documentation of the solution, and work instructions to NYSED. • Returning all SED equipment and assets, if any. • Naming/labeling, storing, and archiving all SED documentation. • Validating all financial obligations between SED and SI. • Participating in Project closure celebration. Deliverables / Artifacts / Acceptance Criteria: **1)** Return all SED equipment and assets, if any. 2) Project Closure Report including updated Project/Work Plan 3) Project completion celebration- Milestone. 4) Complete any remaining procurement requirements. 5) Additional deliverables can be found in the section - **General/Common Deliverables / Artifacts / Acceptance Criteria.** Assumptions and Constraints: • NYSED teams will be available to provide the necessary input.

1.9 Project Deliverables and Payments Schedule

Project Deliverables*					
*Note • The deliverables may change after discussions with the Vendor during phase 1. • Payments are made upon completion of designated phase/s.					
#	Deliverable	Notes	Vendor Payment	Vendor Tentative Payment schedule	Notes
1.8.1	NYSED Approved Phase 1 Deliverables	See the deliverables listed for Phase 1.8.1 - Initiation and Planning	1st Payment	Aug-2023	
1.8.2	NYSED Approved Phase 2 Deliverables	See the deliverables listed for Phase 1.8.2 - Requirements Gathering	2nd Payment	Dec-2023	

1.8.3	NYSED Approved Phase 3 Deliverables	See the deliverables listed for Phase 1.8.3 - Product Development & Proof of Concept	3rd Payment	Apr-2024	
1.8.4	NYSED Approved Phase 4 Deliverables	See the deliverables listed for Phase 1.8.4 - Integration & Interfaces			
1.8.5	NYSED Approved Phase 5 Deliverables	See the deliverables listed for Phase 1.8.5 - Testing	4th Payment	Jun-2024	8 Weeks testing after Integration & Interface.
1.8.6	NYSED Approved Phase 6 Deliverables	See the deliverables listed for Phase 1.8.6 - Data Cleanup & Migration, and Archival	5th Payment: (Phase 1.8.6 & 1.8.7)	Jul-2024	
1.8.7	NYSED Approved Phase 7 Deliverables	See the deliverables listed for Phase 1.8.7 - Reports, Dashboards and Performance Tracking			

1.8.8	NYSED Approved Phase 8 Deliverables	See the deliverables listed for Phase 1.8.8 - Training	6th Payment	Sep-2024	End of September.
1.8.9	NYSED Approved Phases 9 Deliverables	See the deliverables listed for Phase 1.8.9 - UAT Preparation			
1.8.10	NYSED Approved Phase 10	See the deliverables listed for Phase 1.8.10 - User Acceptance Testing (UAT)			
1.8.11	NYSED Approved Phase 11	See the deliverables listed for Phase 1.8.11 - Pre-Production - Business Continuity Planning, Disaster Recovery Planning, Pre-production Checks and Balances	7th Payment	Oct-2024	Oct-24
1.8.12	NYSED Approved Phase 12 Deliverables	See the deliverables listed for Phase 1.8.12 - Go-Live & 2-Weeks Monitoring			

1.8.13	NYSED Approved Phase 13 Deliverables	See the deliverables listed for Phase 1.8.13 – Post Implementation Support (6 weeks)	8th Payment	November/ December 2024	6 weeks (Post Implementation)
1.8.14	NYSED Approved Phase 14 Deliverables	See the deliverables listed for Phase 1.8.14 – **Closing**			

C. QUESTIONS

All questions shall be submitted in writing by **May 17, 2023,** to the RFQ mailbox – cau@nysed.gov. Vendors are **strongly encouraged** to submit questions as early as possible. Answers to all questions of a substantive nature shall be provided to all Vendors who received this RFQ in the form of a questions and answers document on or around **May 24th, 2023.**

D. Acceptance of Work or Validation of Completed Work

- For source code deliverable validation, Acceptance of Work is only verified through demonstrable code/development of NYSED Grants Finance Financial Management System by NYSED ITS, Grants Finance, & Development Team.
- For master data migration validation, Acceptance of Work is only verified by the NYSED Development Team through database validation reports, reconciliation of data tables, and tallying record counts, rows, and columns of Grants Finance (CAFE) system current database with the new SQL Server linked to the new GF procured system.
- For system interfaces successful approval, Acceptance of Work is only verified by the NYSED staff by validating the various reports and integration functionalities.
- For each document-based Deliverable other than source code, data migration, and reports, NYSED shall have an acceptance period beginning on the date written notification of completion was received from the Vendor and as outlined in the Project/work plan. Using the Deliverables Acceptance Form, all document-based deliverables shall require written approval by NYSED to ensure that such Deliverables comply with the terms of the Agreement. The number of business days for any NYSED initial review of a document-based Deliverable shall be no more than **five (5) business days,** unless otherwise mutually agreed to by NYSED Project Manager and the Vendor's Project Manager in the Project/work plan. The five (5) business days period shall begin upon written transmittal by the Vendor Project Manager to NYSED Project Manager that the Deliverable is in final form and ready for approval and shall be counted from and include the first working day following the delivery of the Deliverable to NYSED. NYSED shall provide Vendor with approval of the Deliverable or with a written statement, of the itemized deficiencies preventing approval.

E. AUTHORIZED USER Terms and Conditions

1.10 Vendor's Project Team

- The Vendor awarded under this bid shall provide staffing in adequate numbers and appropriate expertise to fulfill the project's duties as outlined in this bid.
- The Vendor shall submit with its bid resumes of staff hired and sub-vendor's personnel under the terms of this contract for NYSED's review. NYSED reserves the right to approve or disapprove the Vendor's proposed staffing.

1.11 Changes to the Vendor's Project Team

- Any changes to the Vendor's project team must be approved by NYSED. The Vendor shall provide for the continuity of the responsibilities of any position that must be reassigned or replaced with a qualified replacement made available within ten (10) business days, subject to the review and approval of NYSED. Should the need arise to make substitutions for any member of the project team, the Vendor will promptly provide resumes of comparably experienced staff for NYSED's review and approval.

1.12 Project Work Environment

- The Vendor is expected to follow in a Waterfall, Agile, and/or hybrid SDLC methodology agreed on with WBS including above mentioned phases and manageable user stories.
- The Vendor must work with NYSED teams efficiently and professionally. The Vendor shall report to the NYSED Grants Finance Project Manager. Any disputes between the Vendor and NYSED teams shall be resolved by the NYSED Steering Committee.
- The Vendor's key personnel may work on-site as needed at the NYSED Offices in Albany, NY during normal business hours. Otherwise, all the migration efforts should be performed remotely in a secure manner using the NYSED VPN.
- The Vendor will be provided cubicle spaces and personal computers with NYSED network access. The Vendor is responsible for providing all needed equipment for its personnel including cell phones, offices supplies, etc.

1.13 Project Meetings

- The Vendor shall conduct periodic project progress meetings, attend all meetings invited by NYSED and share the meeting minutes through updated project documents.

1.14 Project Document Repository

- NYSED will establish a project SharePoint web site that shall be the repository for all project related documents. The Vendor's key personnel will be provided access to this site and shall be expected to post and maintain all project related documents there.

1.15 Change Management

- The Vendor shall develop and maintain a plan to manage and coordinate proposed changes to the project work scope. No changes to work scope shall be undertaken without the prior, documented approval of NYSED Control Change Board (CCB).

1.16 Reservation of Rights

- In addition to the State's Reservation of Rights set forth in Section 2 of the OGS Centralized Contract:

NYSED reserves the right to: (1) reject any or all proposals received in response to the RFQ; (2) withdraw the RFQ at any time, at the agency's sole discretion; (3) make an award under the RFQ in whole or in part; (4) disqualify any bidder whose conduct and/or proposal fails to conform to the requirements of the RFQ; (5) seek clarifications of proposals; (6) use proposal information obtained through site visits, management interviews and the state's investigation of a bidder's qualifications, experience, ability or financial standing, and any material or information submitted by the bidder in response to the agency's request for clarifying information in the course of evaluation and/or selection under the RFQ; (7) prior to the bid opening, amend the RFQ specifications to correct errors or oversights, or to supply additional information, as it becomes available; (8) prior to the bid opening, direct bidders to submit proposal modifications addressing subsequent RFQ amendments; (9) change any of the scheduled dates; (10) waive any requirements that are not material; (11) negotiate with the successful bidder within the scope of the RFQ in the best interests of the state; (12) conduct contract negotiations with the next responsible bidder, should the agency be unsuccessful in negotiating with the selected bidder; (13) utilize any and all ideas submitted in the proposals received; (14) unless otherwise specified in the solicitation, every offer is firm and not revocable for a period of 120 days from the bid opening; (15) require clarification at any time during the procurement process and/or require correction of arithmetic or other apparent errors for the purpose of assuring a full and complete understanding of an offeror's proposal and/or to determine an offeror's compliance with the requirements of the solicitation; (16) request best and final offers.

1.17 Debriefing / Protest Procedure

All unsuccessful bidders may request a debriefing within fifteen (15) calendar days of receiving notice from NYSED of non-award. Bidders may request a debriefing by submitting a written request to RFQ mailbox – cau@nysed.gov.
Bidders who receive a notice of non-award or disqualification may protest the NYSED award decision subject to the following. The protest must be in writing and must contain specific factual and/or legal allegations setting forth the basis on which the protesting party challenges the contract award by NYSED. The protest must be filed within ten (10) business days of receipt of a debriefing or disqualification letter. The protest letter must be filed with cau@nysed.gov. A protest review committee will be formed, which will include NYSED counsel, Counsel's Office will provide the bidder with written notification of the review team's decision within ten (10) business days of the receipt of the protest. The NYSED Contract Administration Unit (CAU) may summarily deny a protest that fails to contain specific factual or legal allegations, or where the protest only raises issues of law that have already been decided by the courts

1.18 Project Deliverables Narrative

- The Vendor shall provide the required Deliverables (listed in the various Deliverables sections above) and shall work with NYSED to ensure that said Deliverables are provided within the time frames as per the Project/work plan. These Deliverables shall be the basis against which the Vendor's performance shall be evaluated and upon which payments will be made. Payment for the on-going project reporting deliverables will be distributed equally, monthly, across the term of the contract. All payment of project deliverables will be based on NYSED acceptance of the deliverable, as described in the section - **Acceptance of Work or Validation of Completed Work.**

- All deliverables shall be identified with the NYSED numbering scheme shown in the deliverables section listed above. When there are multiple items for a single deliverable, they shall be numbered with appropriate indexing. For purposes of this bid, the terms "shall," "must," and "will" are used interchangeably, and all are to be assumed as mandatory deliverables.

- The Vendor and all its sub-Vendors performing work on the contract resulting from this procurement must sign an Information Protection Agreement provided by NYSED, assuring the confidentiality of all work and discussions carried out under this contract after the contract is awarded. These signed agreements must be submitted to NYSED within seven (7) days after the contract is executed and before any work is done.

- The Vendor will meet the requirements in the attached Appendix R.

1.19 Travel

- Not separately reimbursable.

1.20 Retainage

- NYSED will retain an amount equal to ten percent (10%) of the cost of each Deliverable performed by Vendor for services under this Agreement. The retained amount shall be paid to the Vendor upon the acceptance by SED of all Deliverables for services under this agreement.

1.21 Submission Requirements (Minimum Qualifications)

To qualify for making a bid, bidders must be a Vendor (Contractor) of OGS contract award 22802, Lot 1, 3, and 4. Bidders need to submit the following documentation to the RFQ mailbox – cau@nysed.gov no later than the date and time specified on the first page of this RFQ.

1. Manufacturer/ Authorized Reseller Information (convert to .pdf format for submission)
2. Technical Proposal
3. Financial Proposal (MS Excel format only)
4. Administrative Forms

Technical Proposal

The purpose of the Technical Proposal is to demonstrate the qualifications, competence, and capacity of the Bidder to perform the services contained in this bid. The Technical Proposal should show the qualifications of the Bidder and the staff assigned to provide the defined services.

A Technical Proposal that is incomplete in any material respect may be eliminated from consideration. The following outlines the information required to be provided by Bidders, in the following order. The information requested should be provided in the prescribed format. Responses that do not follow the prescribed format may be eliminated from consideration. All responses to the bid shall be subject to verification for accuracy.

Please provide the information in the same order in which it is listed below, with tabulated format to match each criterion. For example, Tab I – Title Page, Tab II – Table of Contents, Tab III – Executive Summary, etc. The Bidder’s proposal should contain sufficient information to ensure NYSED of its accuracy. The Bidder’s Technical Proposal (excluding attachments, work samples and project plan), should be limited to **no more than 50 pages**. Failure to follow these instructions may result in disqualification.

If the Vendor’s proposal includes use of a sub-Vendor to meet the bid requirements and / or complete work on the bid’s required deliverables, the Vendor must note throughout the technical proposal when Vendor resources and when sub-Vendor resources will be used. The Vendor must also note in the technical proposal the name and business address of the sub-Vendor and the Vendor’s previous work with the sub-Vendor. NYSED reserves the right to require proof of the selected Vendor and sub-Vendor agreement for work on the required deliverables prior to executing a final agreement with the selected Vendor.

Cost information should not be included in the Technical Proposal documents.

Title Page

The Title Page should identify the Bid subject and number; the Bidder's name and address; the name, address, telephone number, and e-mail address of the Bidder’s contact person; and the date of the Proposal.

1. Table of Contents

The Table of Contents should identify each major section of the Bidder's proposal, along with its initial-page number. It shall also include all attachments or addendums to the Proposal.

2. Executive Summary

The Bidder should provide a detailed description of the proposed approach and work effort. The Bidder should describe any unique capabilities that speak to why its services may be superior to those of its competitors.

3. Experience and Staffing

In addition to meeting the Minimum Qualifications (**section 1.21**), the Bidder shall elaborate and provide qualitative details about its experience (state and non-governmental) and ability to meet the qualifications listed in Project Deliverables 1 through 14 above. This experience should include the following:

Personnel

The Bidder should provide profile information for each of the proposed key staff, including subcontracted staff. Profile information should include

- Name
- Proposed role on this project and planned time to be spent on this project
- Years of relevant experience
- Description of relevant experience
- Educational qualifications and professional certifications
- Indication as to which referenced projects this individual worked on
- Name of sub-Vendor, if applicable

4. Project Schedule and Staffing Plan

The cloud-based solution should be implemented in manageable module-based releases until UAT stage. However, we will have to follow a big bang approach to migrate from the current mainframe to the new platform. Project schedule should include:

- Schedule for the module release schedule until UAT, and finally Go-Live
- Chronologically sequenced Summary Task, Subtasks and activities, and milestones
- Start and finish dates for Summary Task, Subtasks, and activities
- Task/Milestone dependencies (i.e., predecessors and successors)
- Resource allocations
- Critical path
- Work Breakdown Structure (WBS)
- Deliverables
- Project Phases/Stages

The Bidder should also provide an accompanying staffing plan that includes, at a minimum:

- Details of how staffing will be provided to meet the project deliverables over the entire lifecycle of the engagement
- The degree to which Bidder staff will work on-site at NYSED
- Any assumptions that the Bidder has made about the expected level of effort of staff on the project

5. Approach

The Bidder should describe its phased approach to executing the project and achieving all required deliverables, including:

- How its experience, practices, and procedures will ensure a successful project
- The comprehensive processes, framework and risk management strategies utilized to meet the requirements
- How its approach will ensure a quality product and timely completion
- Progression of work, stages, sequence of tasks for conversion of current EZSpec reports to Cognos Reports
- The timing for the different trainings to be strategically aligned with the creation of model/module, then reports and dashboards

Financial Response

- The Bidder shall complete and submit Attachment 01 – Financial Response. **Failure to comply with the mandatory format and content requirements may result in disqualification.** The bid price shall cover the cost of furnishing all the defined services and deliverables, including but not limited to materials, equipment, travel expenses, profit and labor, and the performance of all work set forth in this document. The Financial Response Template requires the Bidder to provide pricing for each deliverable and a Total Fixed Price for the Project.
- The Total Fixed Price for the Project as shown in Attachment 01 - Financial Response will be used for the cost evaluation.

Bid Evaluation Process

- NYSED will evaluate each proposal based on the “Best Value” concept. This means that the proposal that best “optimizes quality, cost, and efficiency among responsive and responsible offerors” shall be selected for award (State Finance Law, Article 11, §163(1)(j)).
- The evaluation process will be conducted in a comprehensive and impartial manner, as set forth herein, by an Evaluation Committee. The Technical Proposal will be weighted at 70% of a proposal’s total score, and the information contained in the Cost Proposal will be weighted at 30% of a proposal’s total score.
- Bidders may be requested by NYSED to clarify the contents of their proposals. Other than to provide such information as may be requested by NYSED, no Bidder will be allowed to alter its proposal or add information after the Deadline for Submission of Proposals listed in Key Events and Dates.
- In a tie composite score, the determining factor for the award will be the lowest cost.

Submission Review

- NYSED will examine all proposals that are received in a proper and timely manner to determine if they meet the proposal submission requirements. Proposals that are materially deficient in meeting the submission requirements or have omitted material documents, in the sole opinion of NYSED, may be rejected.

Technical Evaluation

- A Technical Evaluation Committee (TEC) comprised of NYSED staff will review and evaluate all proposals that meet minimum Bidder Qualifications and submission requirements. The TEC members will independently score each Technical Proposal that meets the submission requirements of this bid. The Technical Evaluation is 70% (up to 70 points) of the final score.

Technical Evaluation 70 points
Written Technical Proposal Experience and Staffing (25 points) Project Schedule and Staffing (20 points) Approach (25 points)

Cost Evaluation

- The maximum cost score will be allocated to the proposal with the lowest, all-inclusive not-to-exceed maximum price. All other responsive proposals will receive a proportionate score based on the relation of their Financial Proposal to the proposals offered at the lowest final cost, using this formula:
- C = (A/B) * 30 points

  A is Total price of lowest cost proposal,
  B is Total price of cost proposal being scored, and
  C is the Cost score.

- The cost evaluation is 30% (up to 30 points) of the final score.

Composite Score

- After completion of the Technical and Cost evaluation, a composite score will be calculated by NYSED by adding the technical evaluation points and the cost evaluation points. The award will go to the responsive and responsible bidder with the highest composite score. In the event of a tie composite score, the award will be awarded to the bidder with the lowest cost.

Reference Checks

The Bidder will submit three references. **Do not use NYSED as a reference. Make sure you confirm with references that they will respond to a NYSED call. Submit the following information regarding the references.**

- Company Reference Name
- Individual Contact Name
- Phone number
- E-mail address
- Brief description of work performed

Best and Final Offers

- NYSED reserves the right to request best and final offers. In the event NYSED exercises this right, all Bidders who submitted a proposal that met the minimum mandatory requirements will be asked to provide a best and final offer. Bidders will be informed that, should they choose not to submit the best and final offer, the offer submitted with their proposal will be construed as their best and final offer.

DOWNSTREAM PROHIBITION

N/A

AUTHORIZED USER DISPUTE RESOLUTION PROCESS

Should a dispute or protest arise regarding this RFQ, the dispute or protest will be considered and decided by the Authorized User.

Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.

Manufacturer / Authorized Reseller Information

This Page is to be Completed by the Manufacturer or Authorized Reseller Responding to the RFQ

The RFQ Response must be fully and properly executed by an authorized person. By signing you certify your express authority to sign on behalf of yourself, your company, or other entity and full knowledge and acceptance of this RFQ (including any Questions/Answers or addenda), the OGS Centralized Contract and that all information provided is complete, true, and accurate. Quotes received by RFQ due date/time are binding and non-retractable for 120 days or as stipulated in the RFQ.

Contract #	Manufacturer Name	Authorized Reseller Name

Manufacturer or Reseller Signature: *Date:*	*Phone Number:* *E-Mail:*
Printed or Typed Name:	*Title:*

If you are not providing an RFQ Response, place an "x" in the box, please explain why you are not responding, and return this page only.

☐ WE ARE UNABLE TO RESPOND AT THIS TIME BECAUSE:

After fully completing the information above, please submit this page via e-mail with "Complex RFQ Financial Response" (Excel) to the RFQ mailbox – cau@nysed.gov. Authorized User reserves the right to request the original executed page of this RFQ.