



Exhibit 2.3.2

Solution – Mainframe Cross Functional

VA-240322-PSLI - Mainframe Services

**COMMONWEALTH OF VIRGINIA
VIRGINIA IT AGENCY (VITA)
SUPPLIER STRATEGY AND PERFORMANCE DIVISION**

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The Functional Service Areas below reference sections of **Exhibit 2.2 (Description of Services - Cross Functional)**. The Supplier should review that section of such Exhibit before responding to each functional area. Capitalized terms in this section may refer to section headings in the Description of Services.

Supplier should provide an overall view of the solution and operational approach to meeting the overall requirements contained in the Description of Services. The Supplier need not restate the requirements from **Exhibit 2.2 (Description of Services - Cross Functional)**; rather it should articulate how its unique solution will perform the services.

1.0 Introduction

Peraton's cross-functional solution carries forward the service management practices, and Information Technology Infrastructure Library (ITIL) based processes successfully integrated into the VITA multi-sourcing service integrator (MSI) model of IT service delivery under the current Mainframe Services contract. Our established cross-functional solution provides for a seamless transition from the current contract to this contract, ensuring the Mainframe Services continue to operate per Customer requirements in a manner which provides transparency into information about our services and an avenue for active stakeholder engagement. Our processes are fully aligned to and integrated with the tools and processes implemented by the MSI and are centered around the key Service Management System (SMS) component – Keystone Edge (KSE). In the sections below we go into detail about how each facet of our approach integrates with the MSI, VITA and other suppliers in the ecosystem and supports successful deliver of Mainframe Services to Customers.

We use the Peraton ITSM approach, which is based on the ITIL framework and implemented within VITA's Keystone Edge (KSE) tool suite. This approach drives process efficiency and standardization, resulting in consistent service design and service value delivery throughout the enterprise and to the requirements in **Exhibit 2.2 (Description of Services – Cross Functional)**. Our approach supports a technology infrastructure that has a stable foundation, while adapting services to a changing environment.

We optimize Service Management Lifecycle processes and costs, improving the efficiency of IT processes while managing the balance between quality of services delivered and level of risk exposure.

In collaboration with VITA, our key personnel and ITSM specialists continue to provide support and assist the team to reduce risk, maintain service delivery and continuity, and enable use of the ITIL value streams. Our approach is focused on three components:

- **ITSM Processes and Procedures** – The activities in identification, development, and execution of existing and new service management processes and procedures.
- **Execution within an ITSM Framework** – Delivery of services aligned to ITIL foundations and defined processes and procedures.
- **ITSM Governance** – Execution of governance mechanisms to communicate, coordinate, and govern service delivery across VITA's enterprise.

ITSM Processes and Procedures

As we continue to deliver service management processes and procedures or design and implement new processes, we coordinate and document the service management processes and procedures. Our processes integrate with VITA ITIL aligned business practices, as documented in the Service Management Manual (SMM) and Peraton standards. As we implement or update processes, we continue to bring industry best practices for service management. We align process work packages with defined or required process attributes

Peraton ITSM Highlight

Our service management process and tools improve cost efficiency, increases customer satisfaction, and improves overall service delivery to Commonwealth customers and citizens

and specific business rules, drivers, standards, or policies. We use continuous improvement efforts to identify areas of improvement.

Delivery within an ITSM Framework

Peraton's approach to ITSM life cycle services delivery is to continue applying our current understanding of VITA's policies and business objectives and verify our ITSM processes and procedures continue to align with those policies and business objectives. To do so, we collaborate closely with VITA and the MSI to help achieve the type of infrastructure and service delivery model that best meets desired business outcomes. During Implementation, we will analyze, design, and implement new and updated service reporting and measurement processes and procedures to align to new and updated requirements under the new contract.

Peraton's service management capabilities enable VITA to:

- Design new digital business processes to improve productivity and business performance, enhancing service delivery
- Enhance the organization's ability to manage service value delivery across platforms and manage integration challenges using multiple suppliers
- Define an actionable roadmap of services and technology to realize IT service value
- Integrate financial, procurement, and service provisioning and management processes
- Increase IT process efficiency, establishing a consistent process and clear interactions between processes
- Establish clear measure on the value of services delivered and where to focus investment
- Reduce risks related to volume and frequency of changes, greater complexity of systems and processes, and security breaches

The value Peraton's service management approach provides include:

- Integration and alignment of service management with the organization's vision as a premier leader in state-of-the-art digital solutions that deliver exceptional public service
- Realization of service value to support customer outcomes
- Standardization and automation
- Support for compliance and development of controls

1.1 Service Management Practices

Peraton delivers and conforms to a set of processes base on ITIL guidance which enable consistent management of Mainframe Services within the VITA environment. Our processes fully integrate with and align to the core processes described and documented in the SMM. Our processes do not interfere or conflict in any way with VITA's SMM processes and procedures.

Incident Management

Peraton's incident management process aligns with and adheres to **SMM 4.1.5.2 Incident Management**. The Peraton Service Management team monitors and tracks incidents in Keystone Edge (KSE) ITSM through the Incident Management process. They are the backbone of the process, making sure that no incident gets trapped or bottlenecked in any area of the process. We support the incident management flow, from identification through closure.

Peraton's internal incident management process aligns with the VITA Enterprise core process allowing for a seamless cross tower coordinated effort to identify and resolve incidents in a timely and efficient manner allowing the Customer to resume the business of the Commonwealth. As a mechanism to improve customer satisfaction, we support comprehensive reporting through the Keystone Edge (KSE) suite, along with User Surveys allowing us to fine tune service delivery.

Problem Management

Peraton's problem management process aligns with and adheres to **SMM 4.1.5.4 Problem Management** and is effective in identifying the problem, collecting data about the problem, determining potential causal factors, and developing recommendations, solutions, and solution modifications to prevent the incident from reoccurring. Our RCA process (described below) is critical to continual improvement and includes analysis on causes from technology, process, and people. Our problem management solution, like our incident management solution, has both reactive and proactive approaches, enabled by our knowledge base, system telemetry, and full incident history, giving extensive information on the characteristics of and conditions surrounding a particular problem or incident. From a deep understanding of the problem, we transform ambiguities about "why" an incident occurred into tangible actions for correction, prevention of recurrence, and proactive systemic improvement.

Root Cause Analysis: The Peraton approach to Root Cause Analysis (RCA) follows an investigate, discover, and use process, during which we pinpoint root causes to develop and implement remediation and mitigation action plans. Identification and data gathering provides the key inputs into the process, where our experienced problem management staff uses a "deep dive" approach to identify the cause and contributing factors, leading to an executable Corrective Action Plan. All work performed during RCA is documented in problem records in KSE.

Change Management

Peraton's change management process aligns with and adheres to **SMM 4.1.4.1 Change Management**. Peraton follows change management (CM) procedures to control the life cycle of Mainframe-related changes. We implement procedures in compliance with and in support of VITA processes, and we work closely with VITA to analyze the impact and level of risk associated with proposed changes to allow VITA to make fact-based decisions regarding changes. We actively participate in Change Advisory Board meetings to assist VITA in prioritizing and coordinating change activities.

We work with VITA to document changes, define appropriate change evaluation and approvals, collect, and analyze performance metrics, and report on progress. We properly assess changes (Standard, Normal, Expedited) and receive stakeholder approvals prior to implementation. We are supporting Change Management Boards across the platform to also help with incidents and service issues. We maintain a change schedule that is current and accessible to all stakeholders within the environment. There are three (3) types of changes performed: Standard which is a reoccurring change and has been pre-approved by VITA's Change Manager. Normal change is developed and submitted at a minimum five (5) days prior to requested implementation date in alignment with **SMM 4.1.4.1 Change Management**; and an Expedited change that is created when a critical vulnerability requires an immediate implementation to protect the environment or during an incident to implement a resolution. We implement changes within approved maintenance windows to minimize system impact and widely communicate system unavailability if emergency releases must be applied outside the normal change window parameters.

We coordinate Testing and Change Evaluation processes to verify changes are fully tested prior to implementation. We populate and maintain an LPAR on the Mainframe for testing and validation that is comparable with the production environment to facilitate robust testing with the goal of preventing inconsistencies from being introduced into the operating environment. We monitor and report trending information concerning the effectiveness and efficiency of the Mainframe change process. Our processes additionally address backout of changes in instances where such actions are necessary. Change monitoring may identify opportunities to improve change procedures.

Service Asset & Configuration Management (SACM)

Peraton's comprehensive SACM process aligns with and adheres to **SMM 4.1.4.4 Service Asset and Configuration Management (SACM)** and adapts and scales to meet specific mission support requirements

and strategic objectives. Our approach uses the best practices of existing ITIL and ITSM processes and maximizes the automated capabilities of tools such as KSE.

Peraton's SACM process continually verifies all CIs are identified, managed, tracked, and accounted for by making sure changes are captured, the CMDB is updated, and regular audits are conducted.

Attributes of interest are defined and maintained within the CMDB describing how each CI relates to, interacts, and interfaces with other CIs/assets. Peraton establishes relationships and interdependencies between CIs/assets and captures attributes such as system and application configurations, dependencies, interfaces, change history, documentation, and knowledge records (e.g., stakeholders, known error information, SOPs). We use existing system/application monitoring and management tools, and security management approaches to automate configuration discovery, data validation, and auditing.

We integrate SACM with ITSM processes such as change management, incident management, and service request fulfillment.

Peraton works with stakeholders to continually improve the effectiveness and efficiencies of our SACM processes by reviewing KPIs, metrics, audit results, and lessons learned. We engage our internal team of SMEs and other industry experts to provide the SACM Process Owner insight into operational trends and evolving technologies for consideration. We make sure assets and CIs are managed, tracked, and accounted for through:

Asset and CI Identification and Management: We verify completeness and accuracy of data by performing quarterly reviews of Mainframe CIs and consolidating Asset and CI data in KSE CMDB. Any discrepancies are reconciled.

CI and Asset Tracking: The KSE CMDB remains the authoritative source of data, updated through automated workflows, and integrated CM and asset management (AM) life cycle processes verify the CMDB remains current and accurate.

CI and Asset Reporting: Our SACM process uses data from VITA's KSE CMDB for the documentation and reporting of CIs and assets, to perform data analysis, and share relevant CI and asset data with stakeholders. When new technology is implemented or replaces old technology, Peraton follows VITA's **SMM 4.1.4.1 Service Asset and Configuration Management** process to update the CMDB.

Service Catalog

Peraton's service catalog management process aligns and adheres to **SMM 4.1.3.2 Service Catalog Management**. Peraton works closely with the MSI to review and update the scope of services in the Mainframe services catalog. We support preparation of service catalog content where warranted in regard to the services provided.

We support MSI service catalog management process directives that guide the creation and maintenance of the service catalog. Our processes include audits and reviews to make sure the catalog is accurate and updated to provide consistent information and it incorporates changes to services or service provision in a timely manner. We continue working with VITA to build the best solution for VITA and its user base to enable request fulfillment. Where applicable, we work with VITA to implement further automated procurement approvals and workflows.

Request Management

Peraton's request management and fulfillment process aligns and adheres to **SMM 4.1.5.5 Service Request Management and Fulfillment**. We document service requests related to the delivery of services. We use standard solutions for requests for new services, modification of existing services, and service retirement. Additionally, we document and handle any requests that may not be part of the service catalog, as well as having a workflow and process for handling items presented as service request but are more accurately classified as incidents or changes.

When responding to requests we align fulfillment workflows in accordance with VITA's existing ordering processes out of KSE such as for Mainframe Access Request within the Service Catalog. We support General Service Request located within KSE, Mainframe Access Requests located within the Service Catalog, and Requests for Solution (RFS) per **SMM 4.1.5.8 Request for Solution and Estimate**, for requests for services beyond those customarily performed as part of day-to-day delivery and not covered within the standard monthly charges.

We work with VITA to define key metrics and targets for fulfillment activities. Peraton tracks fulfillment progress against these established targets, analyzes the results, and provides reporting. The results of this analysis may identify improvement opportunities.

Request for Solution (RFS)

Peraton delivers Solution Services in support of VITA's Request for Solution (RFS) per **SMM 4.1.5.8 Request for Solution and Estimate**. Through strong program and project leadership and governance, adherence to best practices, and a deep pool of technical and subject matter expertise we implement projects within the predicted time, cost, and quality estimates. Our structured project management approach provides the foundation for implementations which enable progress on VITA's Technology Roadmap. Peraton maximizes the delivery of RFSs using established project management disciplines, project governance, and integration with organizational change management. In addition, we apply proven practices and processes while taking advantage of lessons learned from similar implementations.

We provide a strong Project Management Organization (PMO) that manages RFSs as requests and projects. Our PMO manages risks and issues, and directs appropriate timely actions, to achieve program objectives. To verify project success, we integrate with the appropriate VITA governance and controls for the VITA projects to support transparency and collaboration.

Our approach to project management provides clear standards, automated processes, and measured controls to manage activities, tasks, deliverables, work plans, budgets, staffing, issues, risks, and milestones for individual projects and releases. This integrated approach reduces project risk by avoiding deviations from VITA-approved requirements and by reinforcing agreed-upon project standards and disciplines. We use industry-standard methodologies and proven processes to promote a common language, effective communication, efficient linkages, asset reuse, and information sharing.

Our approach helps VITA realize the following benefits:

- Common understanding of project responsibilities across the organization
- Traceability from requirements to solution components, to testing results
- Consistent use of repeatable processes and documentation
- Verification that critical tasks are monitored and controlled
- Predictable project performance
- Timely, comprehensive project management communication and reporting
- Ability to proactively plan, execute, and monitor the entire portfolio of project schedules
- Ability to apply lessons learned across future efforts

Disaster Recovery/Business Continuity

Peraton continues its Continuity of Operations (COOP) and Disaster Recovery (DR) program for the Mainframe Service aligning and adhering to **SMM 4.1.3.5 IT Service Continuity Management (ITSCM)**. We apply a proven methodology for providing COOP support which enables rapid and orderly restoration of service in the event of significant disruption to the Commonwealth. Our approach to implement our program included researching and recommending options to VITA, testing capabilities, providing a proof of concept, and developing and successfully implementing all procedures required to fully recover the Mainframe Service in our secondary datacenter in Colorado Springs, Colorado in the event of a significant disruption to service in the primary processing location in Clarksville, VA. These services provide a DR capability for the Mainframe Service that exceeds Recovery Point Objective (RPO) (6 hours or better) and Recovery Time Objective

(RTO) (24 hours or better) targets with full coverage across Customer development and production workloads within the Mainframe Service.

Peraton's COOP/DR methodology facilitates a well-organized emergency response to a contingency event impacting the VITA enterprise or Peraton's production data center which hosts the VITA Mainframe system. Our approach involves the life cycle of analysis, design, build, implementation, in coordination with VITA's enterprise IT business continuity program. This provides the following benefits to VITA:

- Plans addressing both business and technology perspectives
- Plans addressing response to man-made and natural disasters
- Strategies to strengthen employee awareness with a proactive defense against business disruptions
- A comprehensive DR approach that limits VITA's exposure in the event of a disaster and allows VITA and Customers to continue providing critical services to the Commonwealth of Virginia

Peraton provides an Account Point of Contact that participates in ITSCM weekly working sessions as well as attending monthly Governance Meetings to review the state of DR preparedness, plan for annual Disaster Recovery Exercises (DRE), and identify opportunities to improve BC/DR capabilities to VITA and Customers.

Our DR Coordinator regularly reviews DR plans covering Peraton's VITA Mainframe service and applicable corporate DR plans and procedures, identifying gaps or issues that impact the ability to recover critical VITA applications and systems and executing plans to address them. The DR Plan consists of cohesive documents that include an auditable overview, team structures, responsibilities, contact information, and detailed technical recovery procedures (TRP). In conjunction with VITA's Disaster Recovery team, Peraton coordinates and schedules annual exercises with internal technical teams and with other service towers. Upon declaration of a DR event, Peraton is prepared execute our plan to recover and resume operation of the VITA Mainframe service consistent with VITA RTO/RPO requirements.

Design and Documentation of Processes

Under the MSI model, **SMM 1.1 Purpose** serves as the overall umbrella to identify the minimal documentation required, methodologies to use, standards, practices, conventions followed, and detail regarding tasks, reviews, and audits conducted to ensure the final product is reliable and meets requirements that each tower must adhere to. Peraton works within this SMM structure to develop processes in compliance with VITA policies and standards and provide high quality services on behalf of VITA to the Commonwealth Customers.

As part of the **SMM 1.1 Purpose** process, Peraton adheres to and participates in the Process Approval Group (PAG) process per **SMM 2.2.5.1 PAG Charter**. Peraton uses the SMM for process and procedure documentation conforming to the templates developed by the MSI and submits them through the PAG process for review and initial approval and for annual review and revision. Peraton participates in PAG review meetings as required to assist MSI and VITA in understanding the nuances of the Mainframe services.

Process Deployment

In coordination with VITA, we develop and deploy necessary processes, procedures, and controls to monitor and provide effective end-to-end service management and reporting. We continue to support overall service management effectiveness, minimize risk, and enhance service delivery capabilities.

Peraton works with VITA and other contractors to support effective governance, communication, and reporting on service performance, usage, and charges. Peraton provides:

- Daily Incident Overview to the Mainframe Service Owner
- Weekly Change Management Activity Report
- Monthly Service Management Report
- Monthly Unified Threat Management Report

Integration with VITA Infrastructure Services and Tools

Our ITSM processes are implemented and managed within Keystone Edge (KSE) to provide full and comprehensive alignment and integration with VITA's infrastructure and services. Peraton knows that effectively supporting and managing the IT life cycle and service management solutions is fundamental to the smooth operation of the IT enterprise. Additionally, Peraton proactively monitors performance of the environment to identify areas that need improvement, implement changes where necessary, and communicate those findings effectively to VITA management.

Participation in Operational Governance Entities

Peraton collaborates and participates in all activities with operational governance entities to continue providing for delivery of integrated services that help maximize customer satisfaction and meet requirements. Peraton participates in the following governance meetings:

- Service Tower
- PRO meeting
- Platform Service Delivery
- ITFM Governance Meetings
- Architecture Governance Meeting
- Customer Relationship
- Portfolio Meeting
- ITSCM Disaster Recovery Working Group
- ITSCM Disaster Recovery Governance Meeting
- SIIF Governance

Our approach supports delivery of ITSM services within an ITSM framework that includes a governance model between supporting entities allowing collaboration and flexibility in dealing with strategic, operational, and organizational challenges.

ITSM Governance

Governance is essential for successful cooperation, and successful governance involves the following:

- Regular and organized communications
- Effective decision-making across the stakeholder, with decisions made at the lowest levels when possible
- Efficient and effective governance, risk, and compliance mechanisms
- Compliance with established and proven IT governance standards
- An effective governance structure must also involve the right personnel across the full scope of the ITSM solution. The depth of resources that Peraton provides make an ITSM-based framework possible

Comply with VITA Rules

Peraton strives to verify the Mainframe environment complies with VITA rules. This includes meeting security standards (SEC530), Federal standards (IRS PUB1075), as well as Commonwealth mandates. As rules and standards change, Peraton adopts and updates appropriate documentation as well as the Mainframe infrastructure to secure and protect the Commonwealth of Virginia against cyber-attacks.

Peraton complies with VITA Rules, for example, by developing and maintaining a System Security Plan (SSP), an Architecture Overview Document (AOD), and Mainframe Baseline documentation as part of the tools used for compliance.

Conform to Changes to VITA Rules for all Commonwealth Data Systems

When VITA updates or changes their rules and standards, Peraton reviews and develops plans to implement the new rule or standard within the Mainframe environment. As part of this activity, Peraton continues to work closely with agencies residing on the Mainframe to mitigate any risk to agency applications or data. There are times when agencies cannot meet a specific new rule or standard immediately and an exception is

created by the agency in Archer. Peraton provides ideas or recommendations if requested by agencies to assist them in updating their applications to meet the new rules or standards. This partnership with agencies lessens the risk to downtime as agencies test and implement changes to their applications.

1.2 Main Processes

Peraton supports the service management life cycle for VITA. We support and focus on delivering services using the main processes of financial management, service catalog management, information security management, change management, knowledge management (Document Data Store), incident management, problem management, access management, and technology currency.

Service Strategy – Financial Management

We continue working under VITA's guidance to implement, monitor, and improve processes and tools that enable consistent financial management of services provided, including integration and support of VITA's IT Financial Management (ITFM) process. We adapt current processes and procedures and use industry best practices to support prioritized development of new capabilities. Outputs from this process provide data that underpins critical decisions and strategic planning.

Service Design – Service Catalog Management

We continue to support VITA in the updating, maintenance, and delivery of services via the Service Catalog. We update and maintain the Service Catalog based on new and changed information. We also support self-service procurement by simplifying the process of ordering services. We also support the new reporting deliverable, SLA 1.2.5 Service Request Fulfillment, that provides visibility on catalog usage, orders, fulfillment, and asset metrics, customizable by role; this allows for continual improvement of the Service Catalog and the user experience.

We make sure the service catalog management process provides a single source of service and service offering information for all groups and supports effective information delivery and integrates with other processes, including asset and configuration management, financial management, service request management, and others.

Service Design – Information Security Management

Peraton continues working toward the success of VITA's objectives regarding information security. Our approach facilitates alignment of process, technology, and people around a well-architected and managed IT and security infrastructure to facilitate a functionally effective security environment in compliance with VITA security standard SEC530.

We provide a disciplined and structured process that integrates information security and risk management activities to constantly discern potential risks and assess risk level. We develop and execute plans to respond quickly and effectively to events that might disrupt or impact services by diligently monitoring the environment and promptly addressing potential risks. This process sustains the security posture and maintains and optimizes the health and operational capability the Mainframe environment.

Working with VITA system owners or designated parties we determine the appropriate security controls to provide confidentiality, integrity, and availability, yet maintain security compliance. As security controls are determined, Peraton personnel security participates in the integrated compliance and Security Management service performance plans and report to meet the VITA's reporting requirements. The Peraton security team works with VITA and VITA customers to protect the data and environment from emerging security threats. We forward the security event logs to VITA's system, as required.

Service Transition – Change Management

Peraton continues to support VITA in providing effective Change Management following the MSI Change Management Process, as per **SMM 4.1.4.1 Change Management**. We make sure all changes to the Mainframe environment are logged, tracked, and implemented following established processes.

We also work with VITA to document changes, manage the change life cycle, and report on the status of changes. We also maintain a change schedule and manage stakeholder approvals prior to implementation.

Service Transition – Service Asset and Configuration Management

Peraton follows the **SMM 4.1.4.4 Service Asset and Configuration Management (SACM)** process to meet manage Asset and CI life cycles, provide support for the KSE CMDB, and ensure data accuracy and integrity. We work with VITA to define and implement improvements in the process. We also monitor operational trends and evolving technologies for consideration for use with SACM. We closely with the MSI and maintain and process and resolve any identified issues in a timely and effective manner.

Service Transition– Knowledge Management (Document Data Store)

We support VITA's knowledge management requirements by planning, developing, implementing, and maintaining knowledge structures, processes, and tool support. Using CENTER as the Document Data Store and the Knowledge Base module within KSE provides mechanisms to allow stakeholders to access, update, and electronically search for data and information stored within the system. We support oversight and governance activities required to keep the content of knowledge repositories complete and accurate and to provide updates in a timely manner as the VITA environment evolves.

We work with VITA to understand, document, and enable policy, regulations, and standards governing the creation, update, storage, retention, and destruction of knowledge artifacts. These artifacts include documents—such as policies, standards, processes, templates, and operating procedures, as well as records including metrics, audit reports, and test results—resulting from service operation.

We continue to support knowledge sharing through knowledge transfer procedures, including the development and delivery of service-related training and instruction. As part of Knowledge Management, Peraton documents need and tracks the Mainframe service provider team training to support maintaining and improving the quality of services we provide. Our team also participates with VITA provided training to better understand business and technical drivers.

We also work with VITA to define meaningful metrics for monitoring knowledge management services. We collect, analyse, and report on knowledge management achievements. When we identify opportunities for improvement during the monitoring process, and we capture them within the CSI Register.

Service Operation – Incident Management

Peraton works closely with the MSI and other suppliers to quickly identify and resolve incidents through the Incident Management process documented in **SMM 4.1.5.2 Incident Management**. We work in conjunction with the MSI and other suppliers to identify and improve the incident management process and shorten time to resolution.

When incidents are received, we troubleshoot and resolve issues and provide end-to-end ownership of an incident by continuing to monitor tickets escalated to other resolver groups, whether to our team or others. To support response service levels, we make sure tickets are picked up or escalated within pre-defined time frames, depending on the severity/priority. Peraton incident management aligns with **SMM 4.1.5.2 Incident Management**.

Our processes include incident identification, incident logging, initial investigation and diagnosis, assignment or escalation, resolution, closure, and delivery of the customer satisfaction survey, with metrics submitted for trend analysis. To prevent rework or repeat calls, we make sure that the resolution was successful by

confirming with the end user, and making sure the knowledgebase is updated with any improvements to the process.

Incident Escalation and Management: When an incident cannot be resolved by the initial assignment, the issue is escalated for advanced troubleshooting. Incidents initiated by automated detection systems, if not resolved by self-healing automation, automatically escalate following defined escalation procedures, and using warm transfers.

All resolution steps are documented within the ticket, with notification of the appropriate stakeholders according to incident severity. Throughout the incident management process, we frequently update customers on status and progress, using clear and concise communications as defined in the SMM. We resolve the ticket after incident resolution is fully validated.

After an incident is classified as a major incident, activities follow the timeline following VITA's Incident Management Process led by the Joint Operations Center (JOC). Post-event, the Mainframe Situation Manager provides an after-action report describing actions taken, initial assessment of root cause, and any lessons learned. Major incidents, as with all reoccurring and high-severity incidents, are escalated to the Problem Management process.

Service Operation – Problem Management

We work closely with VITA to reduce the likelihood and impact of incidents by identifying actual and potential causes, creating corrective action plans, and managing workarounds and errors. We coordinate with VITA to expand and codify a robust problem management process. In support of the overall Problem Management process, Peraton works in conjunction with other suppliers to identify, implement, and resolve occurrence of issues that cross various infrastructures.

Peraton leads and facilitates the problem management process by gathering specialists and stakeholders who “swarm” the problem, discuss and analyze the data, prioritize, and determine the most appropriate problem owner. Using data from automated tools such as BMC Control-O and Zabbix Network Monitoring and structured problem-solving methods and techniques such as predictive modeling as well as traditional root cause analysis approaches, we focus on root causes and contributing factors. From this deep understanding, we transform ambiguities about why an incident occurred into actions for correction, reoccurrence prevention, and proactive systemic improvement.

Problem backlog and status are tracked and reported for quick access and transparency to VITA. We document lessons learned, process improvements, and innovations to reduce the probability of similar problems occurring in the future.

Problem Management works together with Incident Management and Change Management to increase IT Service availability and quality. When problems are resolved, information about the resolution is recorded. Over time, this information is used to enhance resolution times and identify permanent solutions, reducing the quantity and resolution time of incidents. This results in less downtime and less disruption to business-critical systems, and provides:

- Higher availability of IT Services
- Higher productivity of business and IT staff
- Reduced expenditure on workarounds or fixes that do not work
- Reduction in cost of effort in firefighting or resolving repeat incidents

Service Operation – Access Management

Peraton works with VITA and VITA's customers to define and document user access rights to Mainframe services and infrastructure. All rules are officially approved by VITA, are recorded and tracked within a secure online database, and are subject to reporting and periodic review and update as directed by VITA. We manage requests for access and grant, modify, and revoke access based on the resulting rule base.

Our team follows a best practice-based process for providing access management services in support of VITA. This process follows a least-privileged approach to provide protection of the confidentiality and integrity of VITA data and systems. We manage directives for handling access during the onboarding and offboarding of customers and suppliers and follow procedures allowing emergency customer actions with regard to access provision or revocation.

We track defined and meaningful metrics for monitoring access management. We securely capture, track, analyse, and report on access management requests, activities, exceptions, and violations as directed by VITA. The results of this analysis may identify improvement opportunities, which are entered into the Continual Service Improvement (CSI) Register and managed as directed within the CSI process.

Continual Service Improvement (CSI) – Technology Currency

Peraton continually monitors hardware and software currency status in the VITA Mainframe environment to be sure technology currency is maintained in compliance with the requirements detailed in **Exhibit 4.2 (Financial Responsibility Matrix)** as well as requirements covered by VITA Rules. Vendor release information is monitored and compared to the installed product versions. Prior to exceeding the required thresholds, product updates, and refreshes are planned, scheduled, and implemented to verify all products remain in a compliant state. We document upgrades and refresh implementation plans and project statuses in the Annual Refresh and Currency Plan (ARCP) Recurring Critical Deliverable. VITA focuses on technology serving the Commonwealth to meet a N or N-1 standard for OEM software providing Customers the most up-to-date and secure infrastructure to support the business of the Commonwealth. VITA's roadmap drives the ability for Peraton in planning future upgrades and patching projects to the Mainframe environment.

1.3 Service Management Systems

MSI-Provided Service Management Systems

Peraton integrates with the various components of the MSI Service Management System. Specific elements of the SMS are addressed below.

IT Information Portal

Peraton's service management processes and Mainframe service delivery is fully integrated with the VITA IT Information Portal, Keystone Edge (KSE), which serves as a central repository for all information related to IT service delivery within the VITA platform. Peraton's incident management team monitors status of new and ongoing issues through dashboards and custom reports. Our problem management team analyzes past incident and request data to support root cause analysis, identify opportunities to reduce repeated issues and improve service through continual service improvement initiatives. Peraton's asset management team regularly performs currency and quality reviews of Mainframe Service assets using Configuration Management Database (CMDB) and asset database reports. Our change management team ensures all changes to Mainframe Service configuration items are accurately and completely documented and scheduled within the KSE change management module enabling the service desk, incident management team, and all service towers to track and review scheduled, in progress, and completed changes to support incident resolution and root cause analysis.

Peraton provides information via the Knowledge Base (KB) to support the Virginia Customer Care Center (VCCC) as the first tier of support to handle a variety of Mainframe issues that may arise, providing faster resolution time to the end user. When VCCC is unable to respond/correct an issue or request, the ticket is then reassigned to Peraton for resolution or response. Peraton proactively works with VCCC leadership providing recommendations for improvement, updating KB articles, providing training and guidance for VCCC analyst as requested. Peraton works closely with VITA and MSI staff to update verbiage or forms within the KSE system.

Document Data Store/Data Warehouse System

Peraton integrates with the MSI's Document Data Store and Data Warehouse System, CENTER, to collaborate with MSI and VITA as well as other suppliers in sharing information regarding the Mainframe environment through the SMM and other artifacts such as Architecture Overview Documents (AOD) and System Security Plans (SSP). Peraton has access to the various components within the data warehouse infrastructure consistent with VITA security policies allowing Peraton to read, edit, upload documentation, and view other suppliers' documentation within the ITISP structure.

Billing, Chargeback and Utilization Tracking System ITFM

Peraton is fully integrated with the VITA Billing, Chargeback, and Utilization tracking system. Each month Peraton collects Mainframe system processing data, formats it in compliance with **SMM 5.3 Mainframe RU Listing** and delivers to the MSI ITFM team for ingestion into the ITFM system. The data is processed within the system and used to generate a supplier invoice to VITA for services provided as well as chargeback customer invoices to support cost recovery. Peraton will work with the MSI and VITA as necessary to update billing data collection and delivery to support new billing triggers required by the new contract and ensure a seamless transition to the new billing model. See Section 1.4 Financial Management for additional information about Peraton's Financial Management process support.

Peraton participates in the Financial Management Governance meeting both on a tower level as well as for invoice review including disputes and service credits.

Service Catalog and Request Management Systems

Peraton integrates with the service catalog and aligns and adheres to **SMM 4.1.3.2 Service Catalog Management** to maintain and update Service Catalog items that are tailored to Mainframe Service. Customers request access and authorization to the Mainframe system via a standard service catalog item which collects the required information and initiates service requests in Keystone Edge (KSE) which get assigned to Peraton and other service towers as required for processing. Peraton works with the MSI to keep the Mainframe Service catalog items up to date and accurate.

Custom solution proposal requests are submitted by Customers as part of the Request for Solution (RFS) process. Peraton reviews all demands VITA qualifies for a SPRINT cycle and attends all meetings to assist in confirming requirements have been well documented by the requesting agency and, if not, then providing recommendations and questions for clarification from the Customer. From the RFS Sprints, for any demand that has Mainframe requirements as part of the request, Peraton provides a solution design. Upon receipt of Notice to Proceed (NTP) from the requesting Customer, the solution then moves into a new project.

Asset Management System

Peraton uses the CMDB module of KSE for recording and tracking assets. We work within the MSI SMM process of maintaining the Mainframe assets to include implementation of new assets, decommissioning of old hardware, and data center location of assets. The Peraton account team participates in required meetings associated with the MSI SACM team to be sure we are kept apprised of any changes.

Security Clearance System

Peraton integrates with the Security Clearance System through the MSI and VITA. A background check is required for any new team member coming on to the account and receiving their credentials. The Peraton Account Team ISO oversees this area and verifies VITA is informed when a new member is onboarded. Per the instructions for fingerprinting, once completed, the law enforcement entity conducting the background check provides the results to VITA. VITA in turn provides an email to Peraton of those results. VITA also provides the information to the MSI, including in the Security Clearance System.

The MSI Security Clearance System also documents the Annual SANs Security Training, which all Peraton staff must complete. Peraton's SANs Security Training modules are tailored to VITA's security training requirements to include IRS FTI video and SSA video. Each member supporting VITA, annually takes this

training and provides a copy of the Certificate of Training to the Account ISO that is maintained on the internal SharePoint site and notification is provided to the MSI at the completion of training.

Change Management System

Peraton's change management process is fully integrated with the MSI Change Management process via Keystone Edge (KSE). We work directly with VITA's change management team providing full implementation steps, times, backup steps, as well as agency testing. No changes are performed outside of the change management process. If a change is required during an agency freeze, Peraton obtains additional agency approval. Peraton attends weekly Change Advisory Board (CAB) meetings and works with the change management team toward continuous improvements to the process.

Any change to the Mainframe environment must go through the Change Management process as per **SMM 4.1.4.1 Change Management**. As part of the life cycle of the Mainframe environment, Peraton has a change manager on the account team who is responsible for making sure that all change requests adhere to **SMM 4.1.4.1 Change Management**. This attention to detail allows Peraton to reduce the risk of interruptions to the business of the Commonwealth of Virginia by implementing a change on the first attempt.

As part of the overall process, changes are tested prior to being implemented to identify any issues with new versions. Only then are changes allowed to proceed through the process. Peer reviews and technical teams review implementation steps as part of the pre-change process as well as discussing all upcoming change requests with key members of the Peraton Account team allowing for commination and coordination with agencies and requesting testers as part of the change to validate and help identify any issues prior to going live.

The Account Change manager attends the weekly VITA CAB meeting providing feedback to the account and technical teams on any changes to the process, but they also attend the weekly Department of Motor Vehicles (DMV)'s CAB assisting in answering questions regarding upcoming changes.

As part of Peraton's change management process, we work to plan and schedule changes to be executed during our normal change window and to avoid expedited or emergency requests. However, some changes may require a faster turnaround time due to the nature of the change. The normal process flow steps are followed, but a request is submitted to the MSI change manager with all pertinent business justification for performing the change outside of the normal change process and requesting approval for the expedited change.

Project Portfolio Management and Project Management Reporting System

Peraton integrates with Portfolio and Project Management module within Keystone Edge. Peraton employs this system for all projects from the Technology Refresh document or from an approved RFS. Peraton's PMO works in conjunction with the MSI PMO following **SMM 4.1.1.1 Program Management Office** to deliver quality solutions and upgrades.

Peraton participates in the bi-weekly MSI PMO Governance meeting as well as a bi-weekly Peraton/MSI PMO meeting. Peraton works with MSI PMO office to evaluate and make recommendations for improvements to the PMO process as well as reviewing any risk or issues that arise during delivery of a project. This collaboration verifies projects are successfully completed on time and on budget per the solution.

Incident Management System

Peraton's incident management process is fully integrated with the incident management module in KSE. Incident management is a critical piece of service delivery to the Commonwealth of Virginia to verify minimal interruption to daily business activities. Peraton has an Incident Manager within the Account team who is responsible for making sure any incident assigned to Peraton's queue is handled expediently.

Through KSE, the Mainframe support staff interacts with users to triage the incident, determine the appropriate action, and, as necessary, pull together cross tower suppliers to resolve incidents quickly meeting SLAs.

Problem Management System and Known Error Database

Peraton's problem management process is fully integrated with the problem management and known error database modules in KSE. The problem management module of KSE is used to support problem logging and tracking, known error activities, and workarounds. Whenever a Root Cause Analysis (RCA) of a particular issue, the MSI Problem Management Team opens a Problem Ticket and assigns it to Peraton to provide the Incident Narrative, steps, and information on diagnosing the issue, analyzing the diagnoses, and providing final recommendations to prevent the incident from reoccurring. If the recommendation includes a change (e.g., patch, version update) Peraton follows the Change Management process and documents the change number within the Problem ticket under "related records tab." Peraton meets with the MSI Problem Management Team to review the RCA and provides any further requested information. The MSI then presents the RCA to VITA and/or requesting agency for review and acceptance of the RCA.

Risk Management System

Peraton's risk management process integrates with Archer, the VITA Risk Management System, and adheres to **SMM 4.1.3.8 Risk Management (RSKM)**. This framework is based on the National Institute of Standards and Technology (NIST) Risk Management Framework 800-37 r2 as well as NIST Cyber Security Framework. Upon identifying a risk, a finding is opened in Archer and Keystone Edge as part of tracking the management life cycle of the risk treatment plan and final remediation.

Information Security Management System (ISMS)

Peraton aligns with the Information Security Management System (ISMS) following security policies, processes, standards, and other guidelines provided to assist in management of the Mainframe environment. Peraton provides required documents to the ISMS as required on an annual basis, or more frequently if a major change occurs, and works directly with the MSI for review and improvements to the Mainframe program.

Peraton conducts vulnerability scans using NESSUS on a weekly basis and provides results to the Account ISO for review and actions. Peraton's Account ISO attends weekly Tower Security Meetings where information is shared among suppliers.

Peraton schedules, through the change management process, dates and times to perform patch updates to resolve vulnerabilities identified during scans maintaining a strict security posture conforming to VITA security policies. Peraton provides a Monthly Vulnerability Report to MSI.

1.4 Financial Management

Peraton utilizes the MSI's Service Management System (SMS) to track key assets used in the delivery of the Mainframe Service solution. The assets are owned by Peraton and their life cycle within the service is tracked from provisioning by being added to the CMDB, tracked, and updated as required during the life of the asset, and decommissioned as the life cycle for a particular asset comes to an end. Peraton owned and managed assets which are tracked in the SMS as components of the Mainframe Service include firewalls, routers, storage arrays, Mainframe central processing units (CPU), as well as logical assets such as IBM z/OS logical partitions (LPARs).

Billing, Chargeback, and Utilization Tracking System

Financial management data for both run operations and project management services is collected each month and delivered to the MSI in a machine-readable format easily ingested into the Billing, Chargeback, and Utilization Tracking System to support monthly supplier billing validation and customer chargeback invoice

processing. This resource unit data complies with the format defined in the Mainframe Billing Triggers, accounts for all Peraton charges and any designated third-party vendor charges as applicable and includes all necessary information to identify customer consumption and support chargeback invoice processing.

Each month, as part of email notice to VITA and the MSI that billing data has been delivered to ITFM, Peraton provides analysis of the data provided identifying variances to expected volumes or to past periods and supports analysis by VITA and the MSI. Peraton collaborates with VITA and MSI to review and validate supplier invoices via the monthly Invoice Draft Meeting and supports review and validation of customer chargeback invoicing data prior to release.

Invoice Dispute Processing

Peraton participates with the MSI in management of any invoice disputes raised by customers in accordance with the Invoice Dispute Process. If an invoice dispute is raised by a customer, Peraton reviews and researches the dispute details and confirms accuracy and as required, works with the MSI to clarify the issue by asking questions or obtaining additional data. Invoice disputes are managed and tracked in KSE which allows auditing and validation by VITA as required and provides for a path of escalation to the Peraton account management when they are not resolved within the time frames established in the SMM.

Under the new contract Peraton will collaborate with VITA and the MSI to develop updated resource units and data collection mechanisms and continues to deliver in compliance with the process and data formats documented in the SMM and Mainframe Billing Triggers.

1.5 Security Management

Security Management 4.1.3.7

Peraton aligns and adheres to **SMM 4.1.3.7 Security Management** that facilitates the use of best practices to comply with VITA CSRM Information Security Program Policy v1_0. Under this SMM, Peraton has developed and maintains current versions of the Mainframe System Security Plan (SSP), baseline document, participates in Security Assessments and Audits, and coordinates with MSI Security team to review and make recommended changes to improve documentation prior to submitting to VITA CSRM for review and approval.

Risk Management 4.1.3.8

Peraton works in conjunction with the MSI under **SMM 4.1.3.8 Risk Management (RSKM)** to identify, assess, and control risks, and quantify the possible impact to the business of the Commonwealth agencies that a loss of service or asset would have should an event occur. Peraton complies with Cyber Security Framework as well as Risk Management Framework (RMF) under NIST standards.

Performing Annual Risk Assessments, or if there are major changes to the Mainframe environment, Peraton protects the confidentiality, integrity, and availability of assets and critical Mainframe infrastructure. Peraton's Risk Management practices are in place to monitor and escalate risks, access reliable and up-to-date information about risks, and work to balance appropriate controls to manage the risks following documented processes. Once a risk has been identified, it is entered into Archer and Keystone Edge as part of the management life cycle of tracking and addressing risk treatment plans and remediation.

Peraton's ISO attends the weekly Security Tower Meeting where each tower presents any issues and actions for remediation. Peraton attends the Cyber Security Operations Forum monthly and quarterly meetings to discuss risks, vulnerabilities, threats, and security baseline hardening standards. Peraton submits an Annual Risk Assessment Plan to MSI and VITA for review and approval.

Security Incident Management 4.1.5.7

Peraton aligns and adheres to **SMM 4.1.5.7 Security Incident Management**. Peraton develops and maintains Incident Response Plan (IRP) and submits the plan for review annually. Incident response is coordinated with

other STS through the VITA JOC and notification of the JOC is an early step in the Peraton IRP. The Peraton IRP is also provided during federal audits of Customer storing data with more specific handling requirements, such as IRS Pub 1075 Federal Tax Information (FTI) or Social Security Administration (SSA) data. The Peraton IRP is maintained and updated as needed to improve the process. Peraton participates in VITA's annual Security Incident tabletop exercise, developing responses to simulated incidents in coordination with the MSI, VITA and other service towers and uses this exercise to test and improve the IRP.

Implement Security Processes, Policies, Procedures & Standards

Peraton implements security management processes, procedures, and controls with other STS to address interdependencies, using tools such as NESSUS, KSE, and VITA's Archer system, and workflows required to operate integrated security management across the services and towers. Since the inception of our current contract, Peraton has and will continue to maintain compliance with any applicable Commonwealth, MSI, and federal policies and standards including but not limited to VITA's SEC530, NIST Special Publications (800-53, 800-37), FIPS, IRS PUB1075, FISMA, ISO27001, FTI (IRS PUB-1075), SSA, FedRAMP, CJIS, FISMA, PCI, ISO27001, FERPA, and HIPAA-HITECH. As new or updated standards emerge, Peraton will work with VITA to incorporate these requirements and make updates to appropriate documentation, including templates provided by the MSI to standardize information. Peraton provides all required reports and performs analysis to ensure compliance.

Through our NIST RMF process as seen above and in Section 4.3 of **Exhibit 2.3.1 (Solution – Mainframe Services)**, we manage the security life cycle of Mainframe assets including creation, implementation, and continuous monitoring of the security baseline configurations and standards in compliance with VITA and Customer Rules and requirements including hardening guides, and the SMM.

1.6 Document Data Store

As described also Section 1.3 Service Management Systems, Peraton utilizes the processes and procedures documented in **1.1 SMM Purpose** and **SMM 2.2.5.1 PAG Charter** to integrate with the MSI's Document Data Store, CENTER, to collaborate with MSI and VITA as well as other suppliers in sharing information regarding the Mainframe environment through the SMM and other artifacts such as Architecture Overview Documents (AOD) and System Security Plans (SSP). We maintain SMM documents such as **2.4 STS MF Organization Overview (Peraton)**, **5.3 ITFM Mainframe RU Listing**, **6.3 STS Contract Management (Peraton)**, **8.3.1.2 MF Job Request System Process** to share information about the Peraton and the Mainframe Service we provide to VITA Customers. Peraton has access to the various components within the data warehouse infrastructure consistent with VITA security policies allowing Peraton to read, edit, upload documentation, and view other suppliers' documentation within the ITISP structure.

1.7 Access Management

Peraton has worked with VITA and the MSI to implement procedures supporting VITA's Access Management process ensuring that authorized users are granted access to the VITA Mainframe utilizing a least privilege approach and that unauthorized users are prevented from accessing the Mainframe. Access to the VITA Mainframe and utilization of resources within the Mainframe system is controlled by user account and access rules stored with the CA ACF-2 database on the Mainframe system. The user and rule database are managed by Peraton security engineers in response to access requests submitted in accordance with VITA access management policies.

Access requests, submitted only by a designated, approved individual from a respective organization, are entered through a Service Catalog item in the KSE Portal to request creation, modification, or deletion of Mainframe accounts and resource access authorizations. Requests are reviewed by Peraton and acted upon if submitted by individuals with appropriate authority to approve the requested levels of access and rejected if not.

Peraton has taken steps to ensure exceptions to policies are detected and responded to. Peraton has configured the Mainframe access management system in compliance with applicable VITA Rules such that accounts which are not used within the defined period, their access is automatically suspended, and an email notice is generated to the designated access authority for that organization informing them of the suspension. Peraton performs a daily review of reports detailing system log messages that may indicate unusual or suspicious activity and takes appropriate steps to investigate and as necessary respond to any indications of threats.