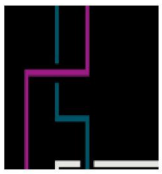

Exhibit 2.3.2

Solution – Cross Functional

Effective June 11, 2021

VA-210517-NTT – Messaging Services

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

11751 MEADOWVILLE LANE
CHESTER, VIRGINIA 23836

Table of Contents

1.0 Introduction....4
1.1 Service Management Practices....5
1.2 Main Processes....6
1.3 Service Integration....7
1.4 Service Management Systems....9
2.0 Program Management....11
2.1 Program Management Office (PMO)....18
2.2 Project Portfolio Management and Reporting System....18
2.3 Current and Ongoing Projects and Solution Requests....19
2.4 On-going Programs....20
3.0 Service Strategy....21
3.1 Strategy Generation and Management....21
3.2 IT Technology Planning....22
3.3 Financial Management....22
3.4 Service Portfolio Management....23
3.4.1 New & Changed Service Introductions....24
3.4.2 New Customer Introduction, Acquisitions and Mergers....24
3.5 Demand Management....25
3.6 Business Relationship Management....26
4.0 Service Design....26
4.1 Solution Design Management....27
4.2 Service Catalog Management....27
4.3 Service Level Management....28
4.4 Availability Management....30
4.5 IT Service Continuity Management....31
4.6 Capacity Management....35
4.7 Security Management....36
4.8 Risk Management....39
5.0 Service Transition....39
5.1 Change Management....40
5.2 Change Evaluation....41
5.3 Release and Deployment Management....41

5.4 Service Asset Configuration Management (SACM) 42
5.5 Knowledge Management 43
6.0 Service Operation 44
6.1 Service Desk 44
6.2 Incident Management 44
6.3 Event Management 46
6.4 Problem Management 46
6.5 Request Management and Fulfillment 47
6.6 Access Management 48
6.7 Supplier IT Operations 48
7.0 Continual Service Improvement 49
7.1 Service Review and Reporting 50
7.2 Process Evaluation and Currency 52
7.3 Service Measurement 53
7.4 Improvement Planning 56
7.5 Technical Innovation 56
7.6 Technical Currency 58

1.0 Introduction

NTT DATA, Inc. has developed our cross-functional solution so that we deliver transparency and high-quality messaging services to VITA by:

NTT DATA has delivered managed services globally

- 4,000,000 + supported desktops, laptops and other devices
- 4,000,000+ end users supported
- 4,500 desktop outsourcing technicians
- 300+ Desktop as a Service users
- 30+ Walk-In/Tech Bar Deployments
- Direct presence in ~90 countries
- Indirect presence through network of partners in ~115 countries

- Fully integrating our cross-functional processes with the Managed Services Integrator's (MSI's) processes (transparency)
- Fully sharing our data about our services and performance with the MSI and VITA (transparency)
- Dedicating our Account Manager/Transition Project Manager (Program Director) to coordinate and collaborate with the MSI and VITA, and to advocate for our shared Customers (quality and transparency)
- Our Program Management Office (PMO) aggressively identifies and works with service delivery teams to mitigate service risks that impacts service quality before they become issues, and by rapidly responding to quality issues to minimize impact to VITA, the agencies, the MSI.
- Using analytics to improve services, rapidly resolve problems, and avoid incidents (quality)
- Automating our processes and leveraging where practicable (quality and transparency)

Our approach shown in **Figure 1** is rooted in IT Infrastructure Library (ITIL) practices and features integration across all Service Towers and the MSI, which will deliver a seamless experience for our Customers' messaging service needs. This includes integrating our processes, tools, and personnel with those of the MSI at all appropriate levels, and fully utilizing the MSI-managed IT Service Management (ITSM) system (ServiceNow). This approach extends our transparency and leads to a higher quality of service and high Customer satisfaction.

NTT DATA will use the MSI-provided ITSM toolset (ServiceNow) with a direct access on the ITSM toolset for all ITSM-related tasks and activities. Our ITSM approach strongly leverages the ITIL CSI model, using metric analytics from results achieved to provide proactive and preventive solutions across the span of our support to the SMS roles. NTT DATA will also use the MSI ITSM toolset for producing service management operational reports for which the data source will be that

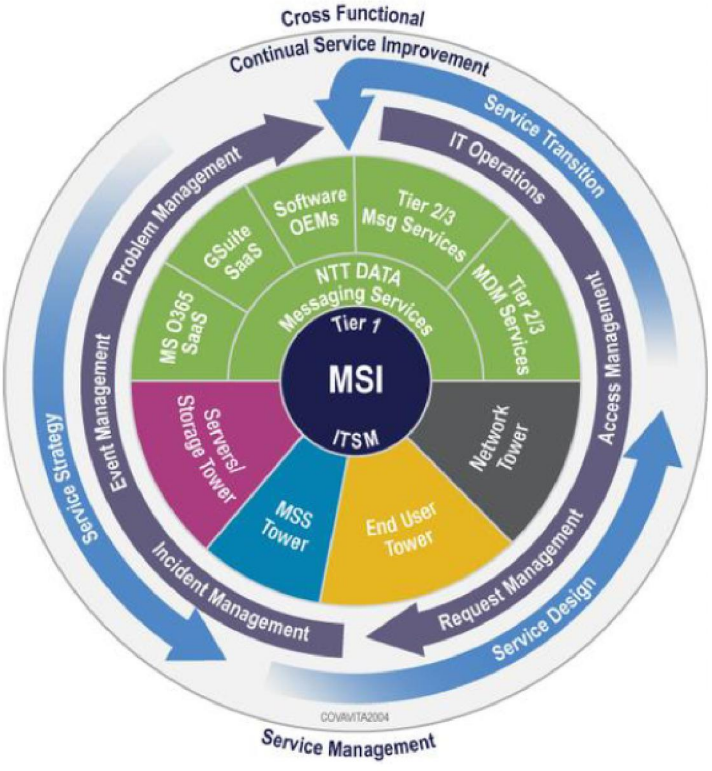

Figure 1. Our Cross-Functional Solution has built in integration, communication, and collaboration with the MSI and Service Towers.

of the MSI. The respective details of the processes and its interlock strategy with the MSI are covered in the individual sections below.

1.1 Service Management Practices

NTT DATA conforms and delivers to a set of processes based on ITIL guidance to enable consistent management of IT services seamlessly across the environment. This is achieved through the tight integration with the MSI and the processes that it manages. NTT DATA will document all our messaging services, processes and procedures, as described in Section 1.4 of the MSA and in the integrated service management manual (SMM). The manual will define the integration approach and mutual responsibilities between the ITSM processes of NTT DATA with those of the MSI.

We will integrate the service management processes such as incident management, problem management, change management, and service request management with the remaining main processes managed by the MSI. Mutual responsibilities between NTT DATA and the MSI will be clearly defined. NTT DATA will abide and adhere to the processes in the integrated service management manual and support the periodic audit by third parties as directed by VITA.

NTT DATA will have a dedicated Risk & Quality Assurance Manager and Service Management Leads responsible for each individual Service Operations process to offer services aligned with the business. Our Service Management services determine how we:

- Interact with users and systems
- Resolve service issues
- Measure results
- Provide reliability, and
- Validate that IT services are delivered in alignment with agreed service levels

NTT DATA will leverage our flexible, scalable business systems framework to control aspects of IT service management. We do not require standardization of infrastructure, vendors, or manufacturers. Instead, we adapt quickly to new and changing requirements with proven and repeatable processes to manage widely varied, globally dispersed IT environments.

Our Service Management activities drive the delivery of high-quality, efficient, and reliable IT infrastructure management services by adapting ITIL best practices and enabling those with world-class, industrialized tools and technology platforms. **Figure 2** shows how the individual processes are interconnected as part of our ITIL-based framework.

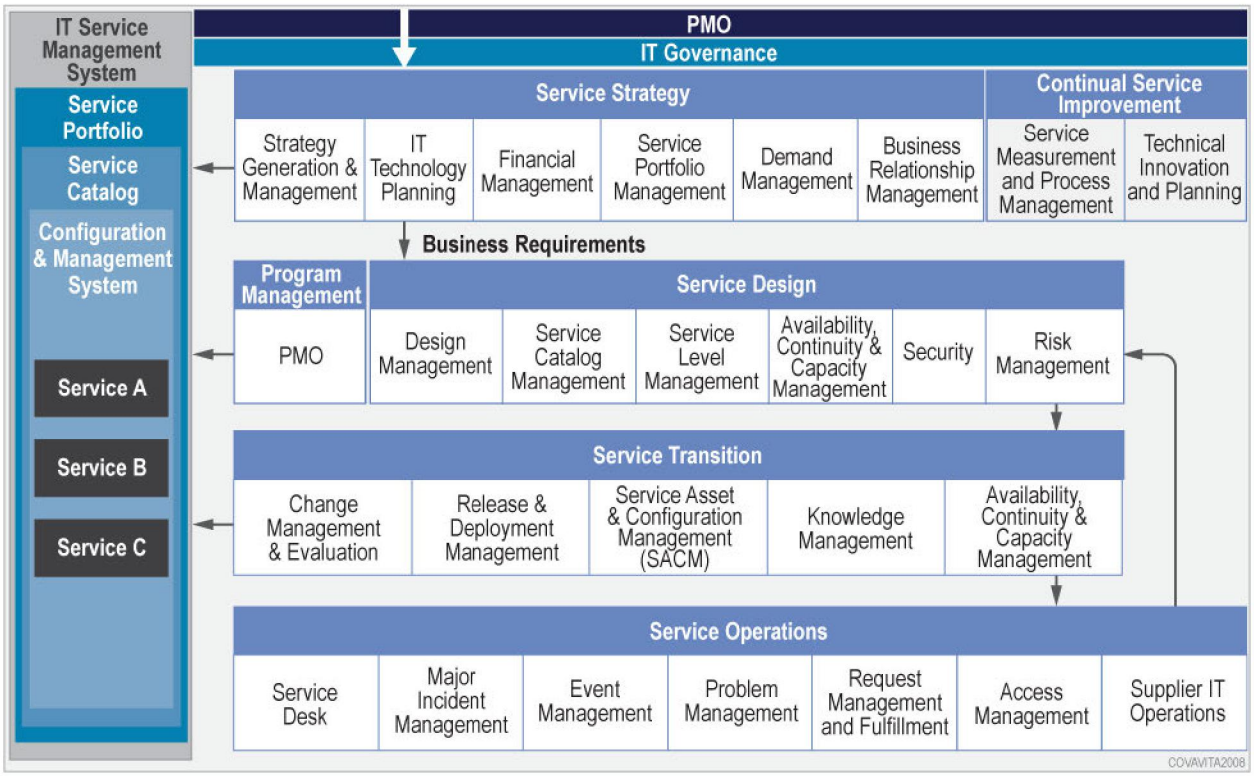

Figure 2. The NTT DATA processes are based on ITIL and the individual processes are highly interconnected to effectively manage the Messaging Services Tower and integrate with the MSI processes

NTT DATA's Service Management approach has been proven in practice by more than 20 years of working with diverse Customers and has provided the following benefits to our Customers:

- Reliability and predictability of IT services to support critical business initiatives
- Adoption of industry best practices and tools managed by skilled professionals
- Accurate measurement of service performance and reporting
- Governance rigor and CSI to processes and systems to achieve service levels that are aligned to business requirements

In a multi-sourced scenario, our Service Management approach enables us to seamlessly work with the MSI by streamlining the disparate processes and tools into a unified, end-to-end solution for VITA using ITSM tool, ServiceNow. By integrating our processes with the MSI's ITIL-based process framework, NTT DATA will deliver a seamless messaging services experience to VITA. This service integration approach fits into the MSI's governance practices to support performance reviews and escalation handling, to name a few areas.

1.2 Main Processes

NTT DATA distinguishes itself by providing a flexible, scalable business systems framework to control aspects of IT service management. We do not require rigid standardization for an infrastructure, vendor, or manufacturer. Instead, we adapt quickly to new and changing requirements with proven and repeatable processes to manage widely varied, globally dispersed IT environments.

We will integrate our service delivery within the MSI's ITSP processes in line with ITIL v3 best practices as listed in the *"VITA-RFP 2021-01 - 02.2 Exh. (Description of Services - Cross Functional)"* document. These key processes as documented in the Service Management Manual (SMM) will be established in-line with the MSI service management practice to achieve a streamlined service delivery of the in-scope services and across the enterprise layer. NTT DATA will participate in the development, review, and documentation of processes, sub-processes, and procedures for the main process with the MSI and the other service tower provider(s), as approved by VITA. NTT DATA's Service Managers will establish governance over the in-scope services and service teams, promote the quality of IT services, maintain standard operational processes, and provide metrics and operational reports for managing SLAs. Our approach integrates our Messaging Services not only with our cross-functional processes, but also with the MSI and the other Service Towers in VITA. We recognize that Messaging Services is just one service tower amongst several service towers delivering the IT services required for the Agencies in the Commonwealth to deliver services to the residents of Virginia. Our team is organized to facilitate that integration of our processes and services with the MSI and other Service Towers.

1.3 Service Integration

The MSI uses ServiceNow as its IT Service Management system. NTT DATA will integrate our ITIL-based processes with the MSI's processes to provide a seamless end-to-end support model for VITA by fully utilizing and integrating ServiceNow into all our processes. NTT DATA will provide some new tools and support existing VITA tools as part of our Messaging Services technical solution to augment our service management processes as shown in **Figure 3.**

Figure 3: NTT DATA's tools will provide a multi-platform, feature-rich, interoperable messaging environment to VITA

Tool	Function	New or Existing	Rationale
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]

Tool	Function	New or Existing	Rationale
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	

NTT DATA will work with the MSI to develop Operational Level Agreements (OLAs) with the other service towers such as the tier 1 service desk to support messaging operations and achieve SLAs.

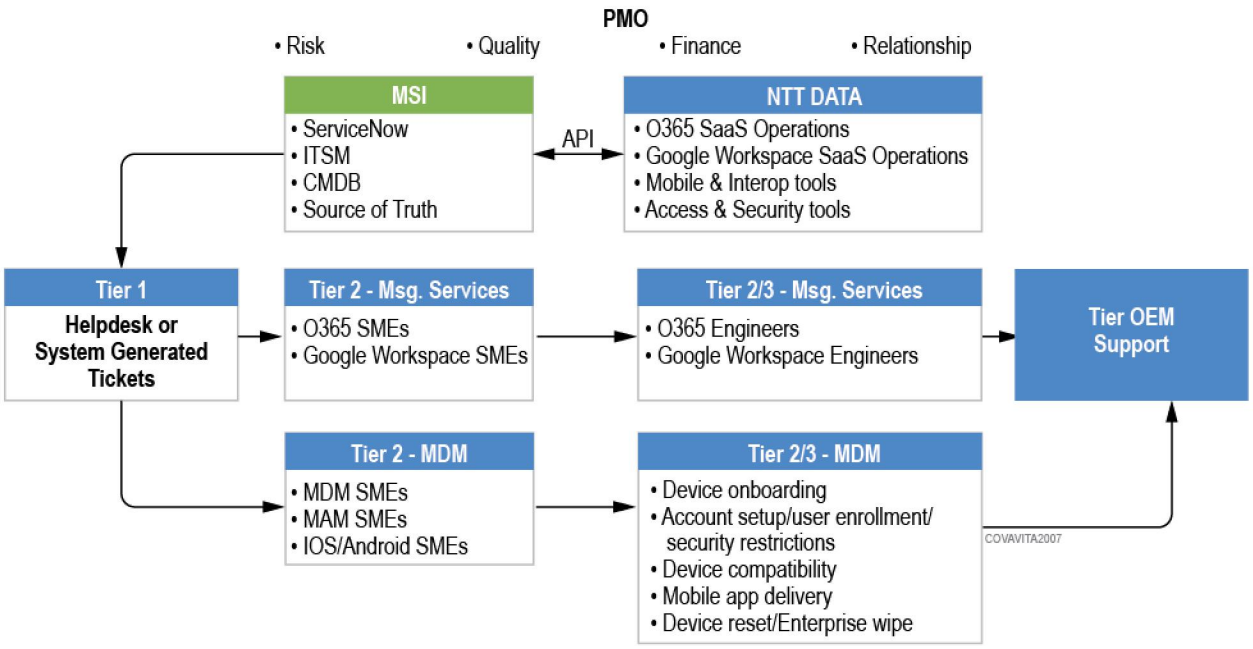


Figure 4. NTT DATA's tools integrate into the MSI's ITSM tool to enable transparency and efficiency across processes and Service Towers

The PMO shown in **Figure 4**, Organizational Structure, will have personnel designated for interfacing with the MSI:

- Process analysts to work with the MSI to harmonize NTT DATA's processes with the MSI's, and to close any gaps between the 2 organizations.
- The PMO Lead will interface with their counterparts to verify that they are aware of the different tasks and activities being performed by NTT DATA, such as projects (present and future), change related activities, strategy related initiatives, and Customer demand or new technology insertion, to name a few.
- The Program Director and Service Operations and PMO Managers will share information gathered from the Agencies regarding Customer satisfaction, future demand-related needs, or change requests, for example.
- The Service Leads will interface with their counterparts in the MSI regarding issues or problems, changes, and other areas that potentially impact Messaging Services or Service Integration with the MSI.

1.4 Service Management Systems

As part of the existing solution, NTT DATA will leverage the ITSM system provided by the managed service integrator to meet VITA objectives. NTT DATA will support the activities to verify the service management system contents and correctness of the information contained therein by VITA for the main processes in scope listed in 1.2 – Main Processes. The service management systems and our proposed solution is outlined in **Figure 5**.

Figure 5. NTT DATA will use proposed solutions including VITA tools and NTT DATA processes to address the requirements of the Service Management Systems

Service Management Systems	Proposed Solution
IT Services Portal	NTT DATA will leverage the MSI-provided IT Services Portal.
Billing, Chargeback and Utilization Tracking System	NTT DATA will utilize VITA's chargeback and utilization systems in accordance with processes as defined by VITA and the MSI.
Service Portfolio Tooling	NTT DATA will leverage the MSI-provided ITSM toolset (ServiceNow) and the hosted service portfolio tooling. NTT DATA will collaborate and cooperate with VITA and the MSI on the content of products and services.
Service Catalog and Request Management System(s)	NTT DATA will leverage the MSI-provided ITSM toolset (ServiceNow) and the hosted service catalog. NTT DATA will collaborate and cooperate with VITA and the MSI on the content of products and services on this catalog.
Asset Management System	NTT DATA will use the MSI ITSM (ServiceNow) for the asset management system.
Service Level Management and Reporting System	NTT DATA intends to utilize the MSI-provided IT Business Management (ITBM) reporting portal to leverage SLA reports for managing day-to-day operations.
Security Clearance System	NTT DATA will use our system to track security clearances that has been proven with our Federal government clients as well as any VITA required tracking system and MSI processes.
Document Data Store	NTT DATA will leverage the MSI Document Data Store.
Change Management System	NTT DATA will leverage the MSI-provided ITSM toolset (ServiceNow) for this process.
Project Portfolio Management and Project Management Reporting System	NTT DATA will leverage the MSI- ServiceNow PPM toolset for this process.
Incident Management System	NTT DATA intends to leverage the MSI-provided ITSM toolset (ServiceNow) for this process.
Knowledge Database	NTT DATA intends to utilize the MSI-provided ITSM toolset (ServiceNow) and MSI-provided Knowledge Database to provide user self-help capabilities.
Problem Management System and Known Error Database	NTT DATA intends to leverage the MSI-provided ITSM toolset (ServiceNow) to support, participate in and lead the Problem Management process where applicable. NTT DATA will use the ITSM to document root cause analyses, change recommendations, and fixes resulting from performing this process.
Software License Management - CMDB	NTT DATA will utilize the MSI provided ITSM tool to track software licenses for compliance and renewal
Risk Management System ServiceNow PPM Risk Management	
Information Security Management System (ISMS)	NTT DATA will utilize the MSS provided ISMS to comply with security policies, processes standards and guidelines. We will collaborate with the MSS to participate in the review and update of any elements of the ISMS.
Service Desk Telephony	NTT DATA will utilize the VITA-provided telephony for tier 2/3 help desk and contact center phone calls.

Service Management Systems	Proposed Solution
Identity and Access Management System	NTT DATA will utilize the provided Identity and Access Management System to define or consume all access and roles to the appropriate systems.
Service Continuity Management Process	NTT DATA will support, and Service Continuity Testing and Management tasks as required, and we will utilize the MSI-provided Service Continuity Management Process for planning and testing purposes.
Remote Administration System	NTT DATA will utilize the VITA provided remote administration system.
Capacity Management System	NTT DATA will use the MSI tool(s) as required to help with any Enterprise-wide capacity planning.

2.0 Program Management

As a Tier 1 IT Outsourcing Services provider, NTT DATA has extensive experience providing IT services to public sector and commercial clients using the ServiceNow platform and ITIL v3 processes. We have deployed the ServiceNow platform and ITIL v3 services for major global clients (e.g., Hilton Hotels) and public sector clients such as the National Science Foundation and Texas Department of Transportation. Overall, NTT DATA has on-boarded 30 large public and private sector ServiceNow clients with over 500,000 users. To highlight our breadth of experience with ServiceNow, NTT DATA is now the world's largest pure-play ServiceNow Consultancy as a ServiceNow Elite Partner with its acquisition of Acorio. NTT DATA team member, [redacted] is intimately familiar with the current VITA MSI ITIL v3 processes and ServiceNow toolset. NTT DATA also has the experience and expertise in the two messaging platforms (Microsoft and Google) as well as the supporting tools needed to achieve the VITA objective to transform the Commonwealth's Messaging Services from a single platform option to a multi-platform feature rich environment.

Figure 6. NTT DATA's organizational structure provides transparent and high-quality Messaging Services leveraging our strong presence in the Commonwealth of Virginia

NTT DATA has organized our team to deliver high quality services and provide transparency to VITA and the MSI on our services, cross-functional processes, and performance. Below are roles and responsibilities of our management team shown in **Figure 6**.

- Our Account Executive/Transition Project Executive, [redacted] will be responsible for providing VITA and the agencies with the NTT DATA resources needed to meet VITA's messaging services objectives for the transition and period of performance. [redacted] reports to [redacted], President of NTT DATA's State and Local Government Business Unit. Reporting to [redacted] are:
    - Contract Manager, [redacted], who will have responsibility for contract compliance.
    - Business Relationship Manager, [redacted], who will have responsibility for business relationship management (BRM), including the collaboration and communication on processes, reporting, demand management and changes with the MSI, VITA and COV Customers.
    - Account Manager, [redacted], who will have responsibility for transition and contract execution through his Operations, PMO, CSI, Security and Architecture managers. [redacted] also will lead the governance for Service Strategy, Design, Transition, Operations and Continual Service Improvement (CSI) cross-functional areas, with [redacted] and the delivery managers participating to provide a comprehensive cross-functional solution.

- The Chief Operations Manager/Project Executive (Service Operations Manager), [redacted] will manage services delivery operations to achieve messaging services SLAs and complete projects to meet requirements, on time and within budget.
- Our Program Management Office (PMO) Manager, [redacted], will provide risk and quality management, reporting of service level agreements (SLAs), as well as project management support including innovation projects with technology experts including our Google, Microsoft, and other software vendor representatives in our Service Operations team.
- Our Continual Service Improvement (CSI) Manager, [redacted], will lead the efforts to conduct CSI of messaging services and related projects including innovations and product enhancements as the underlying technology evolves during the period of performance.
- Our Chief Security Architect (Technical Director, Security Practice), [redacted], and Information Security Manager (ISM) (Information Security Officer), [redacted], will provide the security direction and services to protect VITA Customers' messaging services related data and systems, maintaining compliance with VITA's security requirements as they evolve in the period of performance.
- Our Chief Enterprise Architect, [redacted], and his team of architects and engineers will manage the architecture of our messaging solution to meet VITA's messaging services requirements and achieve the objective to improve performance and efficiency and enable transition to the next generations of methods for messaging services as they evolve during the period of performance.
- In addition, [redacted] will lead our research and development (R&D) personnel and will leverage NTT DATA's $4B annual investment in technology R&D to find opportunities to bring new capabilities to enhance our services for VITA and the agencies.

NTT DATA has a strong presence in Virginia

- We support Federal, State, Local Government and Education Customers out of our Public Sector headquarters located in McLean, Virginia.
- NTT DATA owns three Data Centers in Ashburn, VA providing Customers a total of more than a half-million square feet of space in the most desirable data center location in the world.
- NTT DATA is committed to the Commonwealth as shown by our support of Virginia Department of Transportation, Fairfax County, City of Virginia Beach, and the Henrico County Public School District and the Chesterfield School District.

The Service Leads managed by the Chief Operations Manager and the processes related to each are:

- Incident management
- Major Incident management
- Problem management
- Change and release management
- Request management
- Service level management
- Configuration management
- Knowledge management

As part of the overall responsibility, the Service Leads will participate in the change management process organized by the MSI, analyze incidents for trends, initiate problem management activities, administer repeatable workflows to support service requests, and provide training and mentoring on process roles and responsibilities to NTT DATA tier 2/3 support teams.

NTT DATA understands that the VITA MSI is the single organization in the Information Technology Infrastructure Services Program (ITISP) that is responsible for administration and coordination across all Service Tower Suppliers. As the Messaging Service Tower Supplier, NTT DATA will implement a PMO in close collaboration with the MSI PMO. NTT DATA will adhere to program management and oversight standards provided by the MSI.

Additionally, we will plan to use the Commonwealth Project Management Standard and we are confident that we match or exceed these standards.

Any successful project also must also include sound project management principles. As depicted in **Figure 7**, we use our Services Project Management Framework (SPMF) methodology, a proprietary project management methodology that has been developed over decades of experience managing IT projects. Our SPMF methodology is fully aligned with the Project Management Institute (PMI) Guide to the Project Management Body of Knowledge (PMBOK) as well as established ITIL standards for project management. Additionally, our project managers will be certified Project Management Professionals (PMP) and they will attend any project management courses required by VITA.

Figure 7. NTT DATA SPMF – The NTT DATA project management framework and associated productivity tools provides NTT DATA project managers with the ability to meet requirements on time and within budget.

At the start of this engagement, NTT DATA will work with the MSI to define and implement common project controls needed to successfully deliver services such as migration projects. We will work collaboratively to develop a project management plan that governs this engagement. Once approved, this will become a living document that guides our efforts. The components of our SPMF framework are described below.

Project Management

- **Project Plan Elements:**
- **Risk Management:**

[redacted]

- **Issue Management:** [redacted]
- **Communication Management:** [redacted]
- **Stakeholder Management:** [redacted]
- **Quality Management:** [redacted]

[redacted]

- **Scope Management.** [redacted]

- **Schedule Management.** [redacted]
- **Requirements Management.** [redacted]
- **Project Change Control Management.** [redacted]

Our Experience in Organizational Change Management: NTT DATA offers our clients a wealth of organizational change management (OCM) expertise that we use as needed to help clients with strategic, operational, or technology-based change initiatives. Our company maintains a dedicated OCM Practice with more than 200 past project successes to its credit. This OCM practice will support this project as part of our proposed solution using a senior staffing model that allows us to offer consultants with an average of 12 years of experience each in areas such as communication, organization alignment, training, and leadership development.

Our practice is deeply skilled in enabling and sustaining technology, process, and behavior changes for corporate office, field employees, and other key stakeholders. It maintains a proven change management methodology to provide a role-based focus for optimum integration of change. This practice focuses on building a customized change management approach which aligns with each client's culture and needs, promoting organizational readiness, sustainability, and value integration.

By designing a tailored OCM strategy and plan that focuses on managing and reducing resistance from impacted stakeholders while also laying the foundation of adoption and sustainment, NTT DATA shall help drive earlier

realization of benefits and restore peak performance to your organization more quickly. The below OCM plan is owned and driven by NTT DATA in coordination with the MSI for each migration initiative and is included as part of our proposed solution.

1. **Discovery & Engagement**
    a. Conduct discovery workshops with BRMs, AITERs and users. This will allow us to capture a day in the life of an end user. Multiple discovery session
    b. Conduct discovery sessions with the technical teams and power users who will maintain the tools.
    c. Initiate survey discovery – engage additional users through our discovery survey. This is to allow end users who were not engaged during the initial focus group to provide feedback. Our purpose is to let every day users be a part of the change and not just the receivers.
2. **Impact Analysis**
    a. Discovery analysis -end user, training needs, technical team analysis needs
    b. Change impact analysis - document stakeholder map and impact matrices.
    c. Create the Leadership Engagement strategy
    d. Review the training needs analysis.
3. **Training**
    a. Create an overall training development plan – critical inputs into this process are the discovery workshops conducted during the discovery phase.
    b. Develop and publish end user and technical personnel training material. All training material will be peer reviewed and published in the Keystone Knowledge Base and PlatCore LMS.
    c. Schedule in-person/virtual training to encourage end user participation and change adoption.
    d. Schedule in-person/virtual training classes for the technical staff supporting the tools.
    e. Learning Lab reinforcement sessions
4. **Communications**
    a. Create the Communication Strategy and Plan for distribution information to the impacted user groups.
    b. Leverage the VITA/MSI communication avenues to get communicate project goals, objectives, and timeline.
    c. Explain why a change is being made --justify the change with business benefits.
    d. Demonstrate WIIFM (what is in it for me)
    e. Explain the big picture and define the employee's role in it (how end users and technical teams fit in) – "What does this mean to me?"
    f. Is communication consistent (no mixed messages?)– Actions communicate as well as word.
5. **Readiness and Preparedness**
    a. Go live bridge – a technical call bride will be stood up the day of the migration. Technical team leads will have access to this bridge to communicate status and escalate issues that may arise at the service desk.
    b. Review change readiness through survey questionnaires – will be conducted after the first week of migration. Areas of focus migration readiness, training, and communications. Target audience are BRMs, AITERS, VITA leadership and the impacted agency's leadership.
    c. Present all assessment findings and deliverables for review and discussion for long-term success of the project going forward.

d. Revisit users remaining on platform to ensure consistent leverage of training and support.

In-Flight Projects: During our Program Transition, described in the Implementation Plan (NTT DATA Exhibit 2.4), NTT DATA will analyze the portfolio or projects that are currently active. We will:

- Determine status, milestones, and resourcing of existing projects, work with the MSI, VITA and the current ITISP to determine project health and potential recovery needs and identify business and IT criticality of the projects.
- Identify and assign resources, including current incumbent staff, to continue delivery of the projects while avoiding any impact.
- Increase the project review cadence to identify new issues sooner and perform any remediation activities immediately, if necessary, since any change in management affects the risk profile of the projects,
- Complete the projects as planned and provide clear visibility of project status and delivery to the MSI.

Service Transition: NTT DATA will categorize the project that it monitors and reports on. This includes projects for Service Transition. As part of our planning and preparation activities for transition, we will develop a proposal for each Service Transition project describing all the information required by VITA and the MSI.

The NTT DATA solution to meet VITA requirements for PMO, Project Portfolio Management and Reporting System, Current and Ongoing Projects and Solution Requests and On-going Programs within the context of the MSI are presented below.

2.1 Program Management Office (PMO)

The NTT DATA PMO team will be led by a dedicated, onsite PMO manager, Tammie Young, PMP. Her team will include a variety of leveraged support staff and project managers who will provide support for the approved portfolio of projects and programs within ITISP as well as communicating with Customers and ITISP Governance on ITISP activities including cross-project resource contention and dependencies. Our PMO will expand and contract as needed to support transition, VITA and NTT DATA initiated projects, and program requirements. In addition to PMP-certified, Commonwealth Qualified Project Managers (PMs), the NTT DATA PMO will also include support resources such as technicians, business analysts and financial analysts who will assist the PMs with the administrative tasks required to manage scope/change, schedule, staffing/organization change, communication/reporting, quality, risk and cost.

The NTT DATA PMO will operate in collaboration with and coordinated through the MSI including oversight, PM standards, and use of the MSI's project management tools. The NTT DATA PMO will provide service transition services to meet requirements for the development of consistent proposals for service transition projects. Finally, the NTT DATA PMO will assume responsibility for continuing the development, implementation and support of all Current Projects and provide a written evaluation and assessment of the status to the Commonwealth and the MSI within ninety (90) days after the Service Commencement Date.

2.2 Project Portfolio Management and Reporting System

NTT DATA currently uses the ServiceNow platform on 30 commercial and private sector client accounts and our PMO will coordinate and collaborate with the MSI to support VITA and MSI ITISP Governance. We understand and will utilize as required the Demand, Project and Portfolio Management module within the MSI ServiceNow instance. Our PMO will meet all the requirements for data management and reporting and will validate the

project data aligns with the COV Project Management Standard and project management process. As illustrated in **Figure 8,** NTT DATA understands the capabilities of the ServiceNow platform and its support of the ITILv3 processes to deliver efficient and effective IT services to VITA Customers.

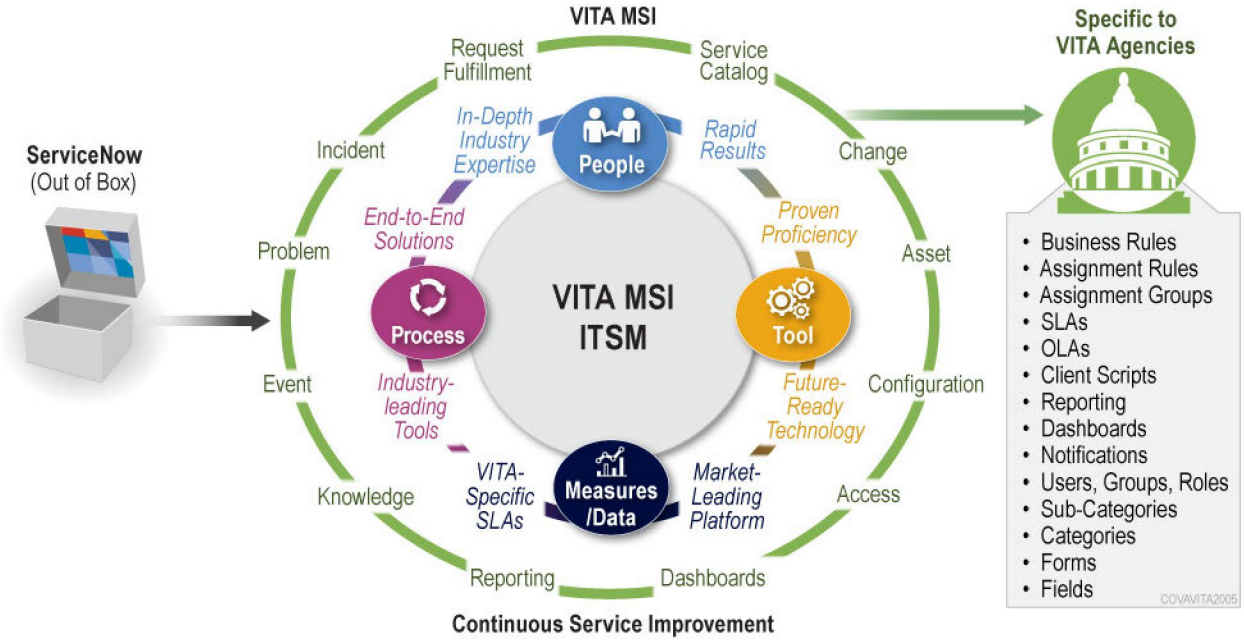


Figure 8. NTT DATA ServiceNow-based ITSM – NTT DATA knowledge and experience deploying ServiceNow for 30 of our existing Customers reduces time and effort to support the MSI ITSM processes and tools

NTT DATA will apply our SPMF project and portfolio management methodology, which encompasses ITIL, Agile, PMI, CMMI, and ISO into a single delivery approach, utilizing the MSI's system. Enterprise project portfolio management allows VITA to decide which projects it needs to execute based on the enterprise priorities, its available resources, the value that the projects expect to deliver, and the benefits of those projects. NTT DATA will verify that all our supporting data is analyzed against our portfolio and will support the MSI to help make project decisions across all Towers at the Enterprise level. By applying our project portfolio expertise, we will be able to utilize the MSI's framework to provide the necessary insight into new and ongoing projects so that the right balance is delivered to realize the maximum value and benefits for VITA and its Customers. We will provide accurate and timely project cost information, cost and resource estimates, implementation and service transition timeframes, and our assessment of project priorities.

NTT DATA recognizes that VITA has limited resources that it must decide how to best apply to gain the most value. We have a history of acting as trusted partners to our Customers to support their business and mission needs.

2.3 Current and Ongoing Projects and Solution Requests

As part of the transition from the current messaging contractor to NTT DATA, our PMO will transition the current list of projects defined in **Exhibit 2.6 (Current and Planned Projects)** by assigning project managers and other required staff to each project, completing knowledge transfer from the incumbent staff, and completing a formal transition of responsibility for each project in coordination with the MSI and upon approval by VITA. The

NTT DATA project teams will follow the established processes for solution request processing, project management and development as well as change management.

NTT DATA understands that the current and ongoing project list may be updated ahead of the commencement date. We are prepared to complete the current work already in process. In places where required, we will also work with the MSI, VITA and Customers to identify any changes required. Our change management process has been tried and tested in many different settings and we will be prepared to work with VITA and the MSI to provide a change management process for changes to scope, requirements, schedules, or cost.

NTT DATA recognizes that change management is an important part of the project lifecycle, and that managing change is critical to a project's ultimate success. Managing change reinforces the emphasis NTT DATA places on striving for no surprises in an engagement. We bring experience with change processes but will be glad to establish any processes required beyond our typical change management process.

NTT DATA, MSI, VITA or other project stakeholders will initiate the change management process. In this process:

- Our project team will document the proposed change, including a description of the change and the impact on costs, staffing, deliverables, and the project schedule. Significant changes are internally reviewed with our Program Director.
- The Project Manager will approve or reject the change request in a timely manner.
- No work associated with the change request will begin until the change has been approved.

If the Commonwealth approves of a project change, we will adjust the project's baseline cost, the project schedule, and other elements of the project accordingly. This approach to change management includes several advantages for both the Commonwealth and for NTT DATA. Among them:

- The Commonwealth will be able to decide if a change is worth the impact to schedule, cost, or level of service.
- The Commonwealth will be able to understand the impact of noncompliance change to the schedule, cost, or level of service.
- NTT DATA will be able to maintain a focus on approved work until the project is amended through an approved change request.

All changes will then be documented, reported on, and managed through the agreed-upon project management channels with the MSI and VITA.

2.4 On-going Programs

The NTT DATA PMO will support the MSI's ongoing programs required to maintain SMM Currency, Technology Planning, ITISP Measures, Disaster Recovery Preparedness, Security Program, Risk Management Program and Refresh and Software Currency and other recurring activities that require the execution of a project to manage an ongoing operation. As the Supplier for messaging services, NTT DATA will provide all the services assigned to it by the MSI to achieve successful completion of these ongoing projects.

NTT DATA has included key resources in its delivery model to support the specific needs of VITA's on-going programs. Ongoing programs will be part of the project portfolio that the NTT DATA PMO will track, monitor, and report to the MSI. These ongoing programs will also be accounted for in our Demand Management (described in Section 3.5) and Capacity Management (described in Section 4.6) planning to avoid resource

conflicts and to validate that resources are available when the ongoing programs are scheduled to be executed. We use the data to forecast resource needs and capacity and will invest accordingly to meet demand.

As with all the projects that we will execute as part of our services, NTT DATA will coordinate closely with the MSI and other Service Towers where necessary so that we minimize delivery risk and maximize project success.

3.0 Service Strategy

NTT DATA will collaborate with and coordinate through the MSI to complete the service strategy processes to define the high-level approach to offering services to VITA and Customers. Working with the MSI, as messaging services supplier, NTT DATA will execute the Service Strategy processes described below to support VITA and agencies in taking a long-term view of the business value of the Tower Services. The sections which follow describe the NTT DATA approach to providing support for the Strategy Generation and Management, Financial Management for IT Services, Service Portfolio Management, Demand Management and Business Relationship Management processes used by the MSI to develop and maintain the ITSP Service Strategy.

3.1 Strategy Generation and Management

NTT DATA will participate in the development and management of an IT services strategy as messaging services tower supplier based on our scope of services. Our scope of services as defined in VITA-RFP 2021-01 Exh 02.1 (Description of Services – Messaging Service) includes:

- Providing the Commonwealth's Messaging Services (email, calendar, archiving, mobile device/application management, security components, contacts, online storage, productivity suites and collaboration services for both the Google and Microsoft 365 platforms) in coordination and collaboration with the MSI into VITA's Integrated Services Platform (ITISP) and function as a Service Tower Supplier.
- Transforming the Commonwealth's Messaging Services from a single platform option to a multi-platform feature rich environment and ensuring interoperability by making day-to-day user activities seamless between messaging platforms.
- Migration of executive branch agencies from Google to Microsoft or Microsoft to Google.
- Evolution of the Commonwealth's Messaging Services to improve performance and efficiencies; enabling and/or transitioning to next generations of methods for Messaging services; providing Services that are flexible, rapidly provisioned, cost effective, transparent, and elastic to meet VITA and Customer needs while preserving enterprise requirements such as Security and Compliance management.
- Proposing value added services related to Messaging Services to VITA throughout the period of performance.

As part of this participation, our services delivery and technology team will use the following information sources to provide input to the MSI strategy generation and management process:

- Lesson learned from the migration of executive branch agencies from Google to Microsoft or Microsoft to Google.
- Lessons learned, volume statistics/projections and trends from service operations (Service Desk incidents, problem records and service requests) and Customer satisfaction surveys.
- Industry trend reports (Gartner, etc.) as well as Microsoft/Google technology roadmaps and competitor offerings (e.g., Cisco).

- Impacts of new technologies on messaging and collaboration services (e.g., 5G, virtual/augmented reality, AI assisted collaboration, new visual collaboration tools, data collaboration)

Our delivery and technology team will work closely with our messaging solution vendors, Google and Microsoft, to map their technology roadmaps to our strategy and technology planning activities. Evolution of the security and interoperability components will also be accounted for in our strategy generation as we continuously look for improvement opportunities to lower IT costs for VITA and to improve end user Customer satisfaction.

We will also work with our SaaS and software solution vendors to understand their technology roadmap and the impact it will have on our services. NTT DATA will develop an optimal implementation roadmap that will balance technology and implementation risk with new capabilities and the resulting efficiencies and potential productivity improvements they will generate.

These areas will feed our Demand Management and continual service improvement. Our Account Executive, Program Director, PMO and Service Operations Leads and Architects will collaborate closely with the MSI, the other Service Towers, VITA, and the Agencies to smoothly transition any new capabilities into the ITISP.

NTT DATA's participation in the MSI's process for the creation and maintenance of the integrated IT Service Strategy will include assistance with strategic assessments, Customer surveys, volume/technology projections, IT delivery strategies, automation candidates, new IT capability proposals, plans for automation of service tower tasks, cross-function/group/location coordination/communication, development of hardware/software standards, access to NTT DATA broader specialists, industry/technology trends, regulatory issues/changes, operating environment lessons learned and resource consumption data, research into automated tools to improve performance that are in compliance with VITA and Customers' standards and technical architectures.

3.2 IT Technology Planning

NTT DATA understands that VITA Technology Planning is an MSI led On-Going Program that produces the annual revision to the Technology Plan and the technology implementation plan for the ITISP. And as the messaging services tower supplier, NTT DATA will participate in the annual Technology Planning event as well as semi-annual briefings, solicit input from VITA, MSI and Customers with regard to the messaging services and as directed by the MSI incorporate these requirements into the Technology Plan. NTT DATA will also assist with the aggregation of the planning data and the development of a rolling three (3) year projection of anticipated changes. NTT DATA will document its IT Technology Planning support services in the format provided by the MSI.

As part our IT Technology Planning support services for our scope of services, NTT DATA Architects and Engineers will provide linkage with technology currency requirements that align with technology refresh plans; support the development of an annual Implementation Plan with scope, timing, risks and cost impacts for VITA and agencies and include specific, short-term steps and schedules for projects or changes expected to occur within the first twelve (12) months of the Implementation Plan. NTT DATA will track and report to the MSI and VITA on new technology advances and technology evolutions and opportunities for efficiency in the delivery of Services. We will also support the Service Design process including maintaining equipment standards providing guidance on standards and to solution architects and maintaining technical currency for the messaging services scope.

3.3 Financial Management

NTT DATA will interface and comply with VITA's financial structure supporting chargeback, utilizing the VITA recommended formats, methods, and processes of invoicing, and data from the MSI's CMDB as the official tool of record. As part of this compliance, NTT DATA will provide cost effective and transparent management of resources in the execution of billable services.

NTT DATA will update all the financial data in the MSI's asset management tool data for all assets that we will track and will verify that VITA's Chargeback system and ServiceNow have accurate financial data. Our personnel will utilize the MSI's ITSM system, ServiceNow, when responding to incidents or performing tasks, and capture the required Agency and organization info to support VITA's chargeback requirements.

NTT DATA will:

- Establish and manage the overall budget as established in the contractual agreement.
- Monitor costs of all resources used in providing the Services, report on the consumption of chargeable resources used to provide the Services; and use the unified system(s) that will track and show assets through their full life cycle (ordering, provisioning, billing, decommissioning).
- Review financial analysis for both procurement and Project management services as described in Exhibit 4 (Pricing and Financial Provisions); report on the volumes and Resource Units consumed on a monthly basis; and investigate variances in forecasted expenses or usage.
- Assist in and support, as needed, the review of monthly invoices to validate the accuracy against assets in the CMDB, orders and decommissioning placed throughout the month, and other factors which would change the volumes or charges on the invoice and interface with the MSI's Chargeback and Utilization Tracking System (the "Chargeback System") and actively participate with the MSI in the invoice validation process.
- Establish an invoice dispute per the existing documented process that allows VITA or a VITA-designated organization to monitor, audit and validate the process on an ongoing basis. Process VITA's invoice disputes including research and review of disputes for completeness and supporting data accuracy, a process for escalating to NTT DATA's management incidents of invoice disputes not resolved within the time frames established, and confirmation to the MSI on amounts received from VITA and any outstanding balance that are not paid with sufficient detail to confirm the unpaid balances.
- Following the process and format defined, provide the MSI and VITA with detailed monthly data that accounts for NTT DATA and designated Third Party Vendors Charges, including details to identify all projects and assets billed.
- Verify that VITA and NTT DATA have the necessary internal financial controls in place to comply with the Sarbanes-Oxley Act of 2002 (SOX).

3.4 Service Portfolio Management

NTT DATA will participate in, contribute to, and comply with the on-going identification and management of the ITISP services portfolio. Also, we will actively participate in identifying potential improvements in the end-to-end business services comprising the services portfolio.

The NTT DATA PMO will lead the service management duties for NTT DATA. The PMO staff are well-versed in the planning, delivery, and reporting of projects to implement or improve messaging and security services. We will work with the PMO to verify that the priority projects are given the attention needed to provide the right services at the right time. The service management team will have the responsibility for updating the service

catalogue for new or changed services and will use the documentation process the MSI provides. NTT DATA has a history of being responsive to our Customers and will not delay the MSI Service Portfolio processes.

In collaboration with and coordinated through the MSI, NTT DATA will conduct and maintain an inventory of accurately described and up-to-date messaging services for inclusion in the Service Catalog, proposed services (service pipeline), and decommissioned services (retired). The service descriptions will include all the data requirements defined in the RFP as well as life-cycle information to support the other areas of Service Delivery. As requested by the MSI, NTT DATA will participate in the MSI's processes for review of existing Services, potential improvements to the Service Portfolio as well as Customer surveys concerning potential improvements and existing deficits. For requests for new services and significant changes to existing services, NTT DATA will work with the MSI, other Service Towers Suppliers, VITA, and agencies to gather information regarding the request and provide proposals for the requested new or changed services within the time limits identified. NTT DATA will be providing reporting as required to the MSI that describes all NTT DATA provided Service updates, additions, and other changes.

NTT DATA will actively market messaging services and will support VITA efforts as needed to identify and acquire new VITA Customers and expand service usage within existing Customers. This includes providing a summary of services to be used in a marketing plan and ideas on how to increase Customer participation for all services. Also, NTT DATA will support service alignments required due to organizational changes and the addition of completely new Customer sets.

3.4.1 New & Changed Service Introductions

Through our lessons learned, we bring the knowledge and understanding of what it takes to work with an MSI, to provide the right information into a service portal rapidly, and to determine OLAs to allow both NTT DATA, the MSI and other service towers to succeed in delivering integrated IT services to our joint Customers. NTT DATA has recent experience at the Georgia Technology Authority (GTA) working with an MSI under a similar model as this RFP.

In collaboration with and coordinated through the MSI, NTT DATA will participate in the MSI's Service Portfolio Lifecycle Management ("SPLM") process for addressing new and changed Services. NTT DATA acknowledges that new service opportunities originate from a variety of sources and involve coordination with other service suppliers to support the MSI's efforts to provide a comprehensive new service proposal to VITA. NTT DATA will submit new service forms through the MSI portal and review the information with the MSI when necessary. Our QA process, led by our PMO, will validate that the submitted forms meet all requirements, and track the process so that any delays are resolved quickly and the new service requests are processed and delivered in a timely fashion. NTT DATA will complete proposals for new service in compliance with all requirements and at no cost to VITA.

3.4.2 New Customer Introduction, Acquisitions and Mergers

In collaboration with and coordinated through the MSI, NTT DATA will assist the MSI and VITA in planning, preparing and implementing any transition or changes related to the Services as a result of business unit additions, mergers or other reorganization (e.g., divestiture, acquisition, consolidation, relocation). NTT DATA will provide all required support services to successfully complete the project(s) required to cost effectively complete this change in business operations and meet the requirements related to these unique requests.

3.5 Demand Management

To meet the requirements of Demand Management Services as outlined in Section 3.5 and its Subsections of VITA-RFP 2021-01 - 02.2 Exh (Description of Services - Cross Functional), NTT DATA's Architecture and Operations team will utilize messaging services utilization statistics from Microsoft and Google and our integration software packages to gather the data needed to support demand management.

In collaboration with and coordinated through the MSI, NTT DATA will actively engage and assist the MSI, VITA and agencies on Demand Management planning on a periodic basis including activities that encourage Users to make the most efficient use of the Services and to assist Customers in minimizing costs while maximizing the value received from the Services. Such assistance will include tracking and reporting the evidence of Demand reductions to the MSI. NTT DATA will participate in the MSI's processes for aligning the supply of Services to the demand for those services, including tracking and reporting predicted and actual consumption of Services to the MSI on a monthly basis. We will also report to the MSI and VITA patterns of business activity across the messaging Services on a monthly basis and identify trends and risks that will possibly cause demand to exceed the available capacity of the messaging Services. NTT DATA will track, analyze and report on patterns of business activity to include annual and seasonal history and Integrate Demand Management with the other ITIL processes (e.g., Capacity Management, Service Level Management) in order to manage long-term demand for the messaging Services and to identify and resolve over- or under-utilization issues and help establish processes for gathering and forecasting VITA's and Customers' project requirements and identify opportunities for the development of differentiated service offerings.

Our delivery and technology team will utilize these solution capabilities when meeting with VITA, its Customers, and the MSI to develop strategy for demand generation planning. Our demand management process helps optimize the flow of new service demands from VITA's Customers against available capacity in a way that maintains Customer satisfaction while managing fulfillment risks and costs. Our vision to support VITA's changing demands is to build additional agility into our service management model and establish a systematic, incremental roadmap towards a future messaging services model. This includes a continual evolution of culture, process, and technology to support VITA's messaging needs. The continuous improvement aspect of our messaging services supports ongoing service improvement, keeping Customers satisfied. NTT DATA will analyze data from tickets in ServiceNow to inform recommendations and decisions on demand for new services.

By leveraging our team's extensive insight into the evolution of messaging technologies, emerging technologies, and creative uses of existing technology, we are positioned to identify new services for VITA that will be implemented within the limits of our bid. These new capabilities will provide improved services, lower cost, or present other benefits. We will use our expertise to demonstrate the business benefits of new and current technologies and services for VITA and its Customers.

NTT DATA realizes that our current pandemic has caused a significant demand for messaging and collaboration services and support across the globe and that as and when a vaccine is distributed, changes in demand will occur again.

NTT DATA will integrate our Demand Management into our Capacity Management and Technology Planning processes to accurately portray our capacity forecast with demand, and to link our technology plans with demand.

3.6 Business Relationship Management

The NTT DATA management team led by Account Executive, [redacted] Business Relationship Manager, [redacted] and Program Director, [redacted] will work closely with VITA Customer Account Managers (CAMs) and key MSI and agency staff to assist the agencies with anticipating their business needs through technology planning and innovation. [redacted] will work with the MSI BRM and the VITA CAM as the central point of contact to answer urgent needs, drive inputs for demand for new messaging services, identify new technology needs, identify, and resolve systemic problems, and gauge Customer satisfaction.

[redacted] will bring critical information back to the delivery team, enabling them to align the technology roadmap with Agency business needs. Interacting with the enterprise, NTT DATA will bring new and evolving technologies to the forefront for review and to facilitate incorporation into VITA's services offerings. This will be done in an inclusive manner, leveraging the MSI BRM and VITA CAM for communication to ensure a single message and cohesiveness within the entire delivery model. Through our experience operating in a similar model for the State of Georgia, we understand the importance of working as a team collectively to achieve the desired results.

Our BRM will act as a single point of contact for VITA CAMs and the agencies for service delivery quality and participates regularly in-service reviews and meetings, managing high-level escalations, and acting as a conduit to communicate business objectives between the client and the delivery organization and third party vendors.

[redacted] will also provide an interface to the MSI so that NTT DATA and the MSI share a joint understanding of VITA, and how we will jointly serve VITA's needs. NTT DATA views IT services at a holistic, enterprise level, and we believe we need to jointly collaborate and coordinate closely with the MSI and the other Service Towers so that VITA has a favorable view and satisfaction of all the IT services they [redacted]s with support from front line managers (Service Operations, PMO, CSI, Security and Architecture) will help identify any potential problems that impact Customer satisfaction across the Service Towers.

In collaboration with and coordinated through the MSI, NTT DATA will support the MSI BRM with fulfillment of Customer requests, provide appropriate points of contact on the function and quality of the Services, participate in periodic reviews on the portfolio of Services, ITISP Governance forums and meetings, support the business relationship, communication, learning opportunities on the business objectives and organization of VITA, and attend as requested regular Customer operations meetings that include the MSI BRM and VITA representative(s) in order to understand, monitor and collaborate on service provision to continually improve the Customer experience.

Complaint Management: NTT DATA will use a structured approach to manage complaints. We will define the transaction or service that caused the complaint, find VITA's pain points, and create an actionable roadmap to improve the Customer experience. The information will be documented and tracked through the MSI and in conjunction with the BRMs until the complaint has been resolved and closed. This process will be linked to the service operations problem management and continual service improvement processes described below.

4.0 Service Design

NTT DATA will collaborate with the MSI and VITA on all Service Design activities, processes, and resources with various Information Technology Service Management (ITSM) processes. Through Design Coordination, NTT DATA

will provide consistent and effective design of new or changed messaging services as well as support of service management systems, architectures, technology, processes, information, and metrics.

4.1 Solution Design Management

NTT DATA will participate in and align with VITA's strategic direction, technical architecture, and documented Technology Plan in cooperation with VITA governance. As part of this, NTT DATA will participate in the identification and standardization of products and services listed as standard catalog items and will support the MSI in implementing solution designs into standard service items for inclusion into the service catalog system. NTT DATA will follow and actively participate in the process for fulfilling new requests for technical solution designs.

NTT DATA will provide experts in the solution areas that we will be supporting. Along with meeting Customer requirements, we focus on designing reusable, cost effective solutions that provide clear business value to VITA. New services design is a key activity in our new service introductions and will be managed as part of our service transition projects. NTT DATA will reach back to our corporate technology innovation capabilities to deliver the latest, best value solutions to meet the needs of the agencies, VITA, and the MSI. We treat each of those stakeholders as our Customers to drive efficient, innovative, and cost-effective designs.

4.2 Service Catalog Management

The service catalog provides vital information for other service management processes: service details, status, and the service interdependencies. As part of the scope of this service, NTT DATA will proactively provide technical and commercial recommendations to the MSI regarding the content and structure of the services catalog, which will be managed by the MSI. NTT DATA will provide all necessary information to facilitate the MSI performance such that all services published in the service catalog have been approved and implemented.

Service Catalog System: NTT DATA has ServiceNow expertise and will provide inputs to improve aspects of the Service Catalog and how it is consumed by our Customers. NTT DATA has an extensive and deep partnership with ServiceNow and has a dedicated practice to continuously optimize our solutions based on ServiceNow.

Services Catalog Contents: NTT DATA will provide and maintain all service catalog information and related data to the MSI for inclusion in the ITSM. NTT DATA will verify that the data in the ITSM for services provided by NTT DATA, or that NTT DATA supports, will be accurate and up to date, and will be updated per the requirements of the MSI as the related services change.

Our Risk & Quality Manager will review and verify that the artifacts in the Service Catalog are accurate and, as part of the Process Management functions, will verify that the Service Catalog is updated without delays so that the MSI, VITA and Customers have the most up to date information as quickly as possible.

Standard Service Descriptions: As part of the information we provide for the Service Catalog, NTT DATA will provide clear, detailed, and accurate descriptions of the services that we provide or support. Any variations of the services based on Customers or locations, for instance, will be accurately and clearly delineated in our descriptions.

Standard Services Monitoring and Reporting: NTT DATA will monitor the services consumed by VITA Customers and identify potential non-standard uses of existing services. These services are used by Customers typically

because of unplanned business needs. Occasionally, these unplanned usages turn into a regular usage pattern that subsequently require new services to be added. NTT DATA will recommend and design new standard services to be added to the Service Catalog by the MSI based on the frequency, criticality, and Customer need of these non-standard services.

4.3 Service Level Management

NTT DATA will leverage our experience with Service Level Management, which includes more than 20 years of delivering services with service level management requirements to over 100 State and Local, Federal Government, and commercial Customers. We shall apply our CSI, Technology Innovation, and rigorous process and project management to meet or exceed our mandated service levels.

To meet the performance requirements, we employ a service level management approach shown in **Figure 9** using a set of standards, processes, and metrics. Based on decades of working with a diverse set of Customers, we applied lessons learned to develop a specific service level management approach to measure results, provide reliability, and document that communications and IT services are meeting the required SLAs. This process promotes superior performance against specific business outcomes and aligns our focus towards the same goals and objectives as those of our Customers.

NTT DATA will utilize the MSI's ITSM, ServiceNow, and the Service Level Management system to capture, monitor and report on our service level performance. Our tools – MS O365, Google Workspace and platform integration and security tools – will automatically feed metrics into the MSI ITSM tool, ServiceNow, to accurately provide up to date measurements for NTT DATA and the MSI to monitor service performance and provide transparency into our services and performance. Our SLA Manager in our PMO will perform continuous random spot checks on service level data, and they will perform a thorough, end to end review of the service level metrics every month to verify the quality of the data. A key point here is that we will be using the ITSM's tools to perform these checks – thus the MSI will see the same data we see when reviewing our service levels. Any corrections will be worked out with the MSI. The key to performance management is the application of the right governance to provide the correct resultant behavior and delivery outcomes.

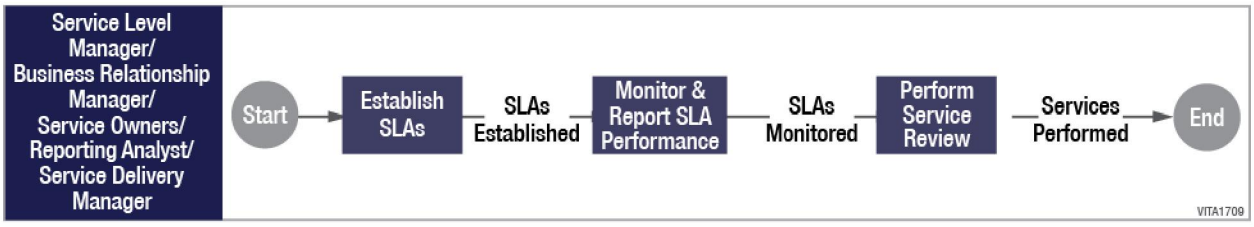


Figure 9. Overall Service Level Approach – NTT DATA monitors and reviews performance and provides an NTT DATA team responsible for meeting engagement objectives and Customer satisfaction

The service level manager is responsible for the following:

- **Service Level Analysis**—Includes reporting, monitoring the efficiency and effectiveness of the operations, and monitoring program performance against program performance levels, including Key Performance Indicators (KPIs).

- **Corrective Action**—Includes action planning process for deficiencies discovered during reviews and assigning each corrective action to an owner for resolution and providing oversight to the process by our Service Leads.
- **Preventive Action**—Uses processes to detect, analyze, and eliminate potential causes of performance standard or service level non-compliance; anticipates and adjusts capacity needs, analyses historical data for processing trends and develops action plans.
- **Root Cause Analysis**—Identifies trends that may lead to less-than-optimum performance, analyses the performance to develop corrective action plans, and verifies that action was effectively implemented and documented.
- **CSI**—Tools and trend data to focus on needed areas of improvement to ITIL service delivery and service support.

Figure 10 presents our structured approach, governance, and work products related to service level management

Figure 10. Our Service Level Management governance approach will result in clear communications with stakeholders, reduce risk, and verify that expectations are met

Process Category	Service Level Management Deliverables	Benefits
Process Expectations	• All SLAs are reviewed daily to drive attainment. • Continuous Service Improvement plan targeting remediation of service issues and SLA failures, and providing documentation of continued cost reduction and quality improvement efforts. • Active management of SLAs, leading to functional and hierarchical escalation before the exception event occurs. • Standard and custom SLA measurements are accommodated.	• Immediately identify performance issues if they occur • Respond quickly to performance issues and correct deficiencies with minimal delay
Governance	• Service-level management • Compliance • Exceptions/exclusions • Review and approval (VITA) • Support for renegotiation	• Clearly align services with strategy and goals • Provide visibility of service delivery risks to executive leadership on the team, the MSI, and VITA • Verify that service level reporting is accurate and meets the objectives of the team, the MSI, and VITA
VITA Interaction	• Interaction with VITA is required, along with account leadership and the delivery leader. • Building tower-area relationship with VITA.	• Confirm Customer satisfaction goals are being met • Verify that service delivery expectations are understood and in alignment • Provide an open channel for clear, unfiltered communications

Process Category	Service Level Management Deliverables	Benefits
Reporting	• A service-level compliance report is developed in conjunction with Citrix, delivered monthly by the Service Leads. • Our data sources are used and accommodate custom requirements. • Monthly service delivery report is generated with analysis/recommendations.	• Provide immediate indications of service levels to the team, the MSI, and VITA • Verify that reporting expectations are understood and being met • Provide VITA and the MSI the transparency necessary to have visibility into our service operations and processes
Training	• The Service Manager educates towers on contractual service levels. • The Service Leads educate tower leaders on proactive management of SLAs.	• Validate that stakeholders understand our service levels and their impact on service levels and Customer satisfaction • Verify that NTT DATA, the MSI, and VITA speak a common language for interpreting service level reports to minimize misunderstandings and incorrect conclusions
Meetings	• Daily operations meeting to review SLA exceptions • Internal service-level review meeting held each month to review SLA results and any exceptions/exclusions • Weekly SLA account review meeting • Monthly SLA VITA review meeting • Quarterly SLA results and exception adjustment meeting	• Open communications channels provide a common understanding of services, issues, risks, and future plans • Provide early indications of potential risks and events that negatively impacts services

Service Level Management and Reporting System. The NTT DATA team will utilize the Service Level Management and Reporting System provided by the MSI and in collaboration with and coordinated through the MSI utilize the data warehouse and Application provided by the MSI for the compilation, collation, maintenance and publishing of all Service Level measures and Operating Level Measures for all Services. NTT DATA will use this system to provide dashboard to view Service Levels in near real time by enterprise and VITA including source data and measures that accumulate into each Service Level Measure. The dashboard view will include performance against Service Levels for availability, downtime, average transaction rate, change requests, incidents, and complaints.

4.4 Availability Management

The goal of Availability Management is to understand the overall availability requirements of client business needs and to plan, measure, monitor, and continuously strive to improve the availability of the IT infrastructure, services, and supporting IT organization. This enables such requirements to be met consistently with a focus on providing cost effective availability improvements that deliver measurable client business benefits. Availability Management covers the evaluation, design, implementation, measurement, and management of the IT infrastructure availability from a component and an end-to-end perspective (i.e., services), including new or modified IT service management methodologies and tools, as well as technology modifications or upgrades of IT infrastructure systems and components. The goal of the Availability Management process is to optimize the

capability of the IT infrastructure, services, and supporting organization to deliver a cost effective and sustained level of availability that enables the business to satisfy its business objectives.

NTT DATA will utilize strategies that have been effective with other clients such as GTA to effectively meet surge support demands, such as identifying resources through retained staffing agencies and partner staff, and by integrating our updated refresh schedule with our capacity and Availability Management processes to adjust our resource planning as business and IT events and changes occur.

Key activities of the Availability Management process are as follows:

- Determining availability requirements for in scope IT services and formulating the availability and recovery. design criteria for the IT infrastructure to maintain IT services design for the delivery of the appropriate levels of availability.
- Determining the critical business functions and impact arising from IT component failure and reviewing where appropriate the availability design criteria to provide additional resilience to prevent or minimize impact to the business.
- Identifying opportunities to optimize the availability of the IT infrastructure to deliver cost effective improvements that deliver tangible business benefits.
- Supporting the targets for availability, reliability and maintainability for the IT tool that underpin the IT service to enable these to be documented and agreed upon within SLAs and contracts.
- Establishing measures and reporting of availability, reliability, and maintainability that reflects the business, End User, and IT support organization perspectives.
- Monitoring and trend analysis of the availability, reliability, and maintainability of IT systems and components.
- Reviewing IT service, system, and component availability, identifying unacceptable levels, and ensuring appropriate corrective actions are taken to address IT availability shortfalls.
- Investigating the underlying reasons for unacceptable availability and providing recommendations for resolution.
- Producing and maintaining a forward-looking Availability Plan, which prioritizes and plans overall IT availability improvements aimed at improving the overall availability of IT services and infrastructure components so that existing and future business availability requirements will be met.
- Providing IT availability reports so that the agreed levels of availability, reliability, and maintainability are measured and monitored on an ongoing basis.

Availability Management System. NTT DATA will provide an Availability Management System and in collaboration with, and coordinated through the MSI, will record and maintain VITA's Availability data to support key activities, such as coordination, solution design, change management, report generation, statistical analysis and Availability forecasting. In addition, NTT DATA will integrate this system with the MSI's Availability Management System and collect Incident, Problem, and Event information (including hardware, software and SaaS service monitoring information) to drive Availability decisions.

4.5 IT Service Continuity Management

NTT DATA will employ effective Business and Service Continuity strategies to minimize the impact of disasters and negative events to our service levels and the Commonwealth's business operations. The NTT DATA PMO will

provide the central point of contact for business and IT service continuity planning, preparedness, and recovery. The characteristics of our upfront strategy for continuity are:

- **Service Continuity**
    - NTT DATA will leverage VITA's primary and secondary data centers. In the event of a disaster, at least one, if not both, of the data centers will remain in service and will be able to maintain operations in the affected areas (assuming it is safe and allowable to do so).
    - NTT DATA will use internal team resources and/or multiple staffing agencies to rapidly ramp up to meet short term staffing needs to support affected areas and avoid impacts to service levels.
- **Business Continuity**
    - NTT DATA will utilize a regional staffing model throughout the Commonwealth of Virginia to provide overlapping coverage to maintain business continuity.
    - We will move our staff or virtually move workload given the restrictions imposed by COVID quickly, as necessary, to affected areas (or from affected areas if circumstances dictate).

NTT DATA's business continuity planning process includes a corporate policy that directs how we will manage our business continuity process. It demonstrates a commitment to a global business-wide approach and is supported by our senior management. NTT DATA requires all critical business functions to complete and update their Business Continuity Plan (BCP) annually and will continue to use existing BCPs for critical business functions such as service management. Where there are no existing BCPs for an existing service provided to VITA, NTT DATA will develop these plans during transition. The BCP strategies will cover both short-term (typically seen as anything from a few hours to under 1 week in time) and long-term outages (typically things that require over 1 week of time) to meet the contractual SLAs with VITA.

The BCP will address the following key areas:

- Call trees and escalation procedures (updated quarterly)
- Client notification process
- Critical scenario planning to include:
    - Human capital loss (including pandemic)
    - Loss of infrastructure (examples: IT, network, power loss)
    - Loss of site or region
    - Critical internal and external dependencies
    - Critical applications
    - Vital documents
    - Recovery/workaround procedures

Recovery Time Objectives

Our optimum minimum Recovery Time Objective (RTO) for our most critical business functions is four (4) hours with a Recovery Point Objective (RPO) of fifteen (15) minutes. The strategy for this recovery involves the redirection of functions to global locations outside the affected areas. Additional recovery times will be covered in our plans depending on the business functions and SLAs provided to VITA.

Plan Testing and Updates

At a minimum, our BCP is reviewed, updated, and tested annually. Additionally, the BCP is updated on an as-needed basis as business processes, technology, or staff change.

Employee Awareness

NTT DATA uses several methods to keep employees aware of the critical role that they play in preparing for any potential disruption or incident. Primary methods include drills, recovery exercises, annual training, and periodic correspondence.

Business Continuity for Supplier Services

In collaboration with and coordinated through the MSI, NTT DATA will develop, maintain, and test BCPs for Messaging Services suppliers that comply with all VITA rules and applicable Federal and Commonwealth requirements. NTT DATA will validate and coordinate the messaging services supplier BCPs with existing VITA Customers' BCPs to ensure that the Customers resume regular business Functions in the event of a disaster or significant event within the required time frames.

IT Service Continuity Planning and Disaster Recovery Preparedness

NTT DATA's involvement in the IT Service Continuity Planning process will span plan development and integration into VITA's Integrated Service Continuity plans. We will leverage our proven service continuity lifecycle to meet VITA's service continuity requirements, timetable, and objectives. The NTT DATA service continuity lifecycle, illustrated in **Figure 11**, covers all phases of the Disaster Recovery Institute (DRI) professional practices and is designed to provide continuous improvement in the service continuity program.

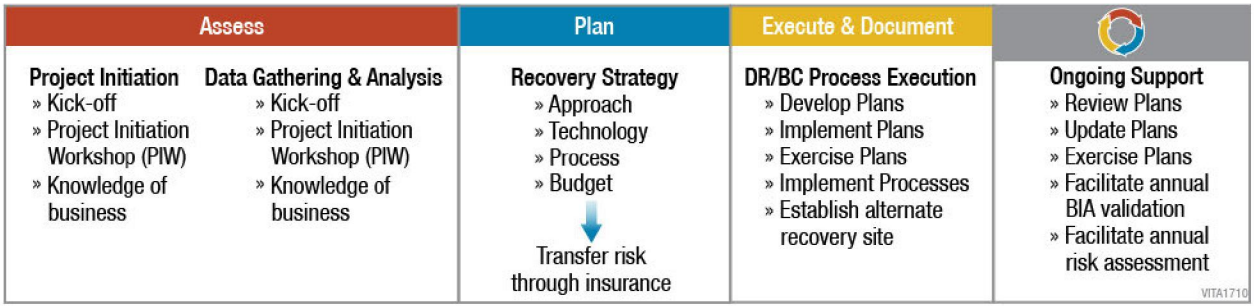


Figure 11. Business Continuity Transition Approach – Based on more than 25 years of experience, the transition phases (yellow, red, and blue) and the ongoing support phase (grey) comprise our Disaster Recovery/Business Continuity Methodology. Annual testing verifies processes are functioning and ready when needed.

NTT DATA will accomplish the participation in the IT Service Continuity Planning program through activities described below.

Gap Analysis

NTT DATA will evaluate current disaster recovery plans supporting the services delivered and conduct a gap analysis. The gap analysis will compare the current plans and desired recovery objectives against our critical practices. Any identified issues will be documented, and formal recommendations made to VITA. After the gap analysis is completed, the data gathered will be used as input to disaster recovery plan development or maintenance.

Plan Development and Maintenance

As previously mentioned, NTT DATA's disaster recovery/business continuity planners will be responsible for managing disaster recovery for our designated services. Plans will be reviewed and updated on a quarterly/annually/bi-annually basis, or as a significant change occurs.

The specific review and update plan sections include the following:

- Emergency contacts and contact numbers
- Vital records and recovery tools off-site storage rotation schedules
- Recovery procedures for all people and technology
- Recovery procedures and scripts for IT infrastructure
- Manual business operation and recovery procedures, as appropriate
- Alternate business unit work area and recovery facility and resources to include recovery teams
- NTT DATA will utilize the ITSM platform/service management workflow system in place to monitor for any changes that might affect VITA disaster recovery plans. We will have hard and soft copies of the master plan(s). Recovery team members, responsible for system-specific recovery procedures, will maintain copies of their individual scripts on their workstations or centralized locations. Our DR planner will be responsible for updates to the master plan and integration changes to the overall VITA service continuity plans.

Hard copies of the plans will also be kept at an off-site storage vault, subject to quarterly/annual/bi-annual replacement due to updates, and available for shipment to the recovery facility in the event of a disaster.

IT Service Continuity Planning. NTT DATA understands that it's BCPs are part of the integrated IT Service Continuity Plan (ITSCP), for the ITISP and individual Customers across all Service Tower Suppliers, and that the ITSCP supports the orderly and rapid restoration of services in the event a disaster declaration by the entire Commonwealth or by an individual agency. As described above and in collaboration with and coordinated through the MSI, NTT DATA will design, construct, manage, maintain, test, and integrate a messaging services ITSCP that integrates and coordinates with the MSI's ITSCP and those of VITA Customers to provide end-to-end service recovery to a working state within VITA's recovery objectives.

IT Services Continuity Solutions. In collaboration with, and coordinated through the MSI, the NTT DATA team will build the technical environments that are needed to support the messaging services ITSCP including establishing roles and responsibilities, plans and projects to implement ITSCP requirements and performing On-Going, continuous monitoring and operational tasks to maintain the specified DR/ITSCP required environments to enable declaration and successful restoration at any time on an individual application, server or device basis and provide DR services on a per system basis as a Service Catalog add-on for all Catalog items unless an exception is approved by VITA.

IT Service Continuity (ITSC) Preparedness. NTT DATA will provide the on-going support that produces an Integrated DR Test Plan and verifies through regular scheduled test exercises that the Services provided by the MSI, NTT DATA and other Service Tower Suppliers will be recovered within the required and agreed upon business time frames.

Service Continuity Exercises

NTT DATA will participate in all integrated service continuity exercises planned by VITA and the MSI. We will integrate into the service continuity exercise format used by VITA and the MSI; however, if needed, we

recommend our formal, structured project management methodology to prepare for the recovery exercise. In the NTT DATA methodology, DR planners coordinate strategy meetings, configuration worksheets, and all required resources between VITA, vendors, the recovery site, and off-site storage.

NTT DATA will coordinate documenting risks and mitigating or resolving issues prior to the exercise. The planners will create and distribute to all participating NTT DATA team members a recovery exercise packet, with contents that includes, but are not limited to exercise criteria, measurable objectives, recovery team contact lists, problem reporting and escalation procedures during the exercise, user connectivity guides and relevant recovery site information. During the exercise, the DR planner will coordinate and manage recovery activities for the NTT DATA in-scope services. The DR planners will also issue status reports at pre-defined times and verify that problem and time logs are completed.

In the event a problem occurs that prevents or significantly impairs the functionality of the exercise, the planner—using the escalation procedures—will contact VITA personnel to discuss the problem, its impact, and the recommended course of action. Our DR planner will prepare a post-exercise report for VITA in alignment with the existing MSI goals of a 7-day initial report and 20-day formal report .

Other Activities

The requirements for messaging service continuity have not been discussed at length and NTT DATA desires to engage VITA in a further discussion to develop detail requirements for completing its business continuity plan.

In the event of a crisis, NTT DATA will take an all-hands-on-deck posture and provide crisis management

IT Service Continuity Actions. NTT DATA will comply with VITA's procedures for declaring a disaster, coordinate with the MSI to execute the Integrated ITSC Plan, notify the MSI and VITA as soon as possible of a disaster or potential disaster, report to the MSI on progress in restoring the Services, and cooperate with the MSI, which will manage resource dependencies between Customers, Service Tower Suppliers and Third Party Suppliers, in restoring the Services.

Crisis Management. NTT DATA will provide such immediate assistance and increased support as requested by the MSI in relation to the management, containment and resolution of any Crisis and assist the MSI, as requested, with the management, containment and resolution of any Crisis across the integrated services, and the planning and coordination of any restoration of the end-to-end services.

4.6 Capacity Management

The purpose of the capacity management process is to plan for the capacity of IT services and the IT infrastructure to meet the agreed capacity and performance-related requirements in a cost-effective and timely manner. Capacity management is concerned with meeting both the current and future capacity and performance needs of the business.

NTT DATA's capacity management services will help with balancing current system quality while planning for future resource demands and timing the implementation and deployment of those resources. Capacity management services are comprised of utilization reporting, performance management, and capacity planning, and are delivered by the NTT DATA PMO:

- Utilization reporting is the collection and reporting of data from monitoring systems to measure resource usage for a specific period.
- Performance management is the analysis of the data collected to determine the cause of a performance issue and the recommendations for improvement. Performance management focuses on the here-and-now quality of service.
- Capacity Planning combines the analysis of usage trends with a client's business information, such as strategic growth plans, to determine the impact to the IT environment and to report on the infrastructure resources that will be needed in the future.
- Demand Management provides for an expanded planning service, where we incorporate demand models for products and services to accurately forecast the impact on the infrastructure.

NTT DATA will follow and cooperate with the existing, defined capacity management system in place today with the MSI, utilizing and continuously updating the MSI Capacity Management System (CMS). NTT DATA will work within the existing CMS framework so that service capacity is planned, managed, and implemented to meet short-, medium-, and long-term business requirements. We will follow established capacity service levels, escalation, reporting, and priority guidelines, and our Service Leads will monitor overall capacity management, working to make sure all adequate capacity for in-scope services are provided as defined.

NTT DATA will utilize MS O365 and Google Workspace tools for utilization tracking, capacity, and availability management, and integrate these tools with ServiceNow. This provides NTT DATA and the MSI a continuous picture of our capacity plans.

NTT DATA's capacity planning and performance management services align with ITIL's capacity management process, as our objectives are to:

- Provide and maintain a capacity plan, which reflects current and future needs of the client
- Provide advice and guidance to all other in-scope areas of the business and IT on all capacity and performance-related issues
- Verify that the performance of the services meets all the agreed targets by managing the performance and capacity of both the services and devices in-scope
- Help with the diagnosis and resolution of performance and capacity-related incidents and problems.

Capacity Management System. NTT DATA will utilize and integrate with the MSI-provided Capacity Management System (CMS) for the Services and provide input to the update of the CMS within designated timeframes with the capacity information (technical capacity, thresholds, forecasts) of newly acquired items, changed items and any other relevant information required.

4.7 Security Management

The following components are included in our solution to satisfy the security management requirements detailed in Section 4.7 of VITA-RFP 2021-01 - 02.2 Exh (Description of Services - Cross Functional).

Information Security Manager. An Information Security Manager (ISM) is included in the NTT DATA organization chart supporting the VITA messaging services operations and will manage the overall security program for the VITA messaging services tower. There will be a staff of leveraged security analysts who will support the ISM. The ISM will work collaboratively with VITA to understand, anticipate, and recommend risk mitigation while promoting the overall information security protection for the VITA information assets.

Furthermore, as depicted in **Figure 12**, the ISM will achieve VITA's stated requirements in the SOW by:

- Fully understanding all relevant VITA polices and regulatory standards and optimizing information security services to meet requirements
- Working with the service integrator and other delivery teams to integrate the latest threat intelligence into appropriate information security architectures
- Enabling an integrated and comprehensive information security incident response process that provides for the timely and effective response to information security events
- Analyzing the information security architecture and establishing an information security roadmap that addresses emerging risk

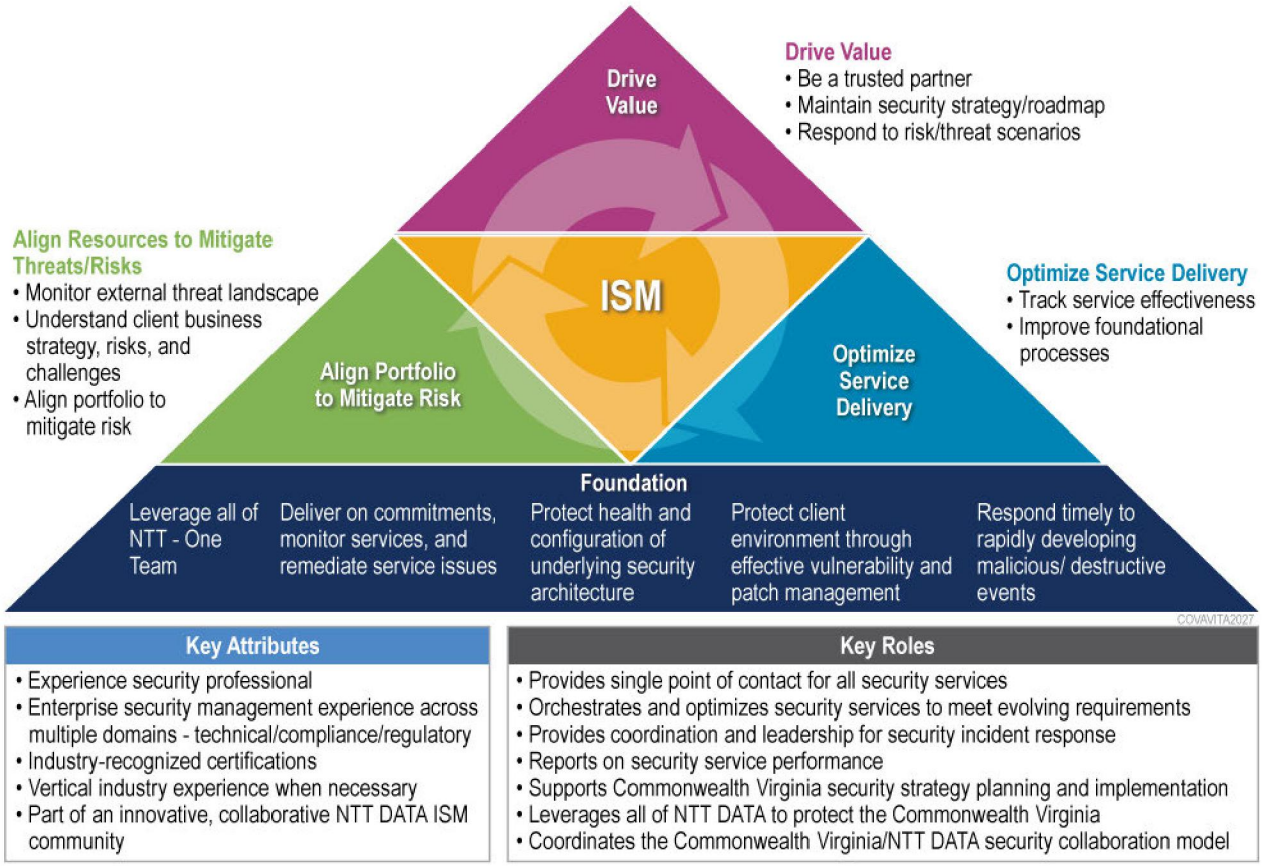


Figure 12. **NTT DATA ISM Value Framework.** *The NTT DATA approach to security management achieves VITA's security objectives for messaging services within the MSI ITSM framework.*

Information Security Team. The NTT DATA information security team will also develop an Incident Response Plan for all messaging operations. This plan identifies responses, resources, responsibilities, and other actions to be taken when a security incident occurs. Our incident and problem management processes support continuing process improvements and are based on ITIL best practices, a framework to resolve service disruptions consistently.

When a suspicious incident is identified, the team will take the necessary steps to mitigate the threat before damage is done, including making configuration changes or simply working hand-in-hand with the MSI or VITA

team until the issue is resolved. We leverage industry best practices to provide a complete response and strategy for security incidents.

NTT DATA engages in five phases of incident response:

- Preparation—Plan a process for detecting and reacting to incidents per client need.
- Detection—Quickly and reliably obtain information to determine whether it is an event that threatens an organization's security.
- Analysis—Determine scope, impact, and severity to establish an appropriate response and develop a strategy to implement that response.
- Action—Draft a detailed root cause analysis, execute forensics activities, if necessary, and restore the system to operational state.
- Post-Mortem—Make recommendations and policy decisions to prevent future damage and carry out any other post-incident actions.

Security Program: NTT DATA will participate in the MSS' Security Program as it pertains to the scope of Messaging Services provided by NTT DATA. This will include security patching, any related security measures, security monitoring where applicable, and security testing of the environment.

Security Assessments: NTT DATA will perform security assessment from within the scope of our services and will participate in the development of any security requirements that are in our purview. We will make machines available for penetration testing by the MSS and participate in risk assessments, security design reviews, and other requirements as defined by the MSS.

Security Assessment by Third Parties: NTT DATA will participate in the twice yearly SSAE 16 security assessments performed by designated 3rd parties as directed by the MSS and VITA. We will make the appropriate documentation, machines, IT systems, artifacts, and personnel available to efficiently conduct the required audits and assessments. We will generate the necessary reports, remediate findings and vulnerabilities, and close out POA&M actions assigned to NTT DATA to comply with security requirements.

Security Incident Management: NTT DATA will participate in the development and implementation of IT security policies, processes, tools, and procedures for handling security incidents in compliance with the Information Security Incident Management Plan (IS-IMP). We will help develop the IS-IMP as it pertains to the scope delivered by NTT DATA so that security incident responses are managed with the same detail, effectiveness, and urgency of all Severity 1 incidents.

NTT DATA will provide the necessary personnel to support any security investigations and cooperate with law enforcement and regulatory officials when necessary.

Security Clearance Management: We carefully vet potential new hires so that they meet all program and job requirements and perform a background check and suitability validation before presenting them to VITA for consideration. NTT DATA's structured assessment and screening process includes conducting thorough background checks early in the process, using the same suitability review requirements as VITA, to help validate there are no delays during the clearance process. NTT DATA will incorporate VITA's security clearance requirements into our vetting and clearance processes.

Security Clearance System: NTT DATA will utilize the Security Clearance System provided by the MSI and update our own tracking system to be compatible with any VITA data requirements. We will limit access to the Security

Clearance System based on the roles and access levels established in the manual. Our FSO and designees will participate in the MSI-required training for the system.

4.8 Risk Management

Risks exist in every business situation and our success in meeting VITA's expectations depends on our ability to effectively manage risks. NTT DATA has implemented processes to identify and manage risks throughout the life of the account and has been proactive in developing risk mitigation strategies. A key component of the risk management approach is the thorough, proactive risk assessment, which identifies risks associated with different aspects of the environment (technology, facilities, processes, and people).

The risk management process provides a central collection point for tracking and managing risks that occur throughout the operations phase of the account lifecycle. It is intended to serve as a discussion point with the client, especially during the planning and budgeting cycle, with a focus on identifying unmitigated or emerging risks that may result in a disruption of service and require client funding to mitigate.

Risk Monitoring, Identification, Reporting, Prevention and Mitigation

Each week, NTT DATA will initiate an internal review of the account's risk management workbook with the service delivery team to assess the status of risk mitigation plans and determine whether a collaboration with VITA is required to mitigate risks. Once an internal review is completed, the status of the risks will be discussed with VITA, reflecting opportunities to improve service delivery by eliminating and mitigating risks identified in the environment.

The NTT DATA Service Management team and QA Manager will be responsible for managing NTT DATA's risk management process, based on our SPMF project management framework, and integrating it into the MSI's framework. Our QA Manager is responsible for the IT and delivery risk for our services scope.

We have the experience to be the low risk provider for VITA through engagements such as GTA, where we deliver services that are structured very similarly as herein. The following are just a few examples of our approach to minimizing risk:

- Transition Risk Mitigation – NTT DATA will hire some of the incumbent staff to lower the risk of transitioning services from the previous incumbent to NTT DATA. As described in our Implementation Plan in Exh 2.4, we will work with VITA and the MSI to identify the incumbent staff necessary to minimize the risk to VITA and the messaging services to the Commonwealth.
- MSI Integration Risk Mitigation – NTT DATA has partnered with incumbent [redacted], also located in Virginia, is providing mobile device management for a portion of the VITA Customer mobile device population and is familiar with the MSI processes and ServiceNow-based MSS.
- Messaging Services Delivery Risk Mitigation - Provide corporate Delivery Excellence and Quality Assurance resources to act as "independent" quality evaluators to identify areas of messaging services delivery risk and provide recommendations for mitigation or contingency planning.
- Cross-platform Interoperability Risk Mitigation – NTT DATA has selected a set of proven interoperability tool vendors and products that we manage along with the Google and Microsoft to provide a seamless experience for VITA and the agencies.

5.0 Service Transition

Service Transition is a key element of the ITILv3 processes which manages the introduction of new or changed services into the production environment. It consists of:

- Change Management including use of a change management system;
- Change Evaluation;
- Release and Deployment Management which includes Release Management, Service Validation and Testing, Pre-Production Testing and Post Deployment Messaging Support;
- Service Asset and Configuration Management (SACM) which includes Configuration Management, Configuration Management System (CMS/CMDB) and License Management and Compliance; and
- Knowledge Management which includes Training and Education, Document Data Store, Contract Management, Site Information Management, and Customer Information Management.

Our solution to meeting the requirements for each of these elements of Service Transition are described below.

5.1 Change Management

NTT DATA will follow the existing change management process in accordance with the requirements in the Service Management Manual and as directed by the MSI. A rigorous change management process verifies that the effect of a modification is thoroughly understood, planned for, approved, and implemented without issue or consequences to the IT environment

NTT DATA intends to leverage the existing MSI-managed change management tool/system for documenting, recording, assessing, and approving change records. The Service Manager will participate regularly in the Change Advisory Board (CAB) meetings (organized by the MSI) to verify the effective execution of the change management process and that an appropriate review of planned operational changes takes place with due consideration of the business and technology risk of planned operational changes. The Service Leads will also review the change records and the necessary information for successful execution, including detailed implementation, verification, back-out procedures, justification, ownership, approvals, schedule, and affected configured items.

Changes will be scheduled in accordance with agreed-upon maintenance windows whenever possible. Changes that need to be implemented immediately will be subjected to an emergency change process that is mutually agreed between NTT DATA and the MSI. After a change is implemented, the change record will be updated with disposition information. Any failed changes will be evaluated and investigated by problem management to confirm that all processes are updated to prevent recurrence. The change management process is successful only after we validate with users that the modification met their expectations for improved service, quality, or enhancement. NTT DATA will document regular periods for scheduled maintenance and standard changes (that is, maintenance periods) for its scope of services.

Our change management process will include end-to-end security testing of any new or changed services transitioned into service and will be included in as part of our reporting.

Remote software installation (soft push) projects are managed according to project guidelines with test, pilot, and client approval prior to production, and are not typically subject to the change management process.

Change Management System. As described above, NTT DATA will use the MSI provided Change Management System (CMS) and follow the standardized change management methods and procedures, provided by the MSI,

and document the overall Change Management process including the use of the Technical Review Board (TRB) to review all Major Changes, the Change Advisory Board (CAB) to manage Changes to the Services and the standard request for change (RFC) form to request and process Changes throughout the life of the change until formal closure.

5.2 Change Evaluation

NTT DATA will design, implement, maintain, and operate a common and shared change evaluation process as part of the overall change management process described in *Section 5.1 Change Management.* NTT DATA will perform a risk assessment for all major changes based on the Service Design Package (required specifications, predicted performance, and the acceptance criteria) for the proposed change, and report assessment findings to the MSI. NTT DATA will also analyze the intended and unintended effects of a change and provide a report of the evaluation to the service integrator. After implementing a change, the Service Leads will provide input to the MSI on the actual performance of the in-scope service. The Service Manager will report findings in an evaluation report, which will inform the Post Implementation Review (PIR) carried out as part of our change management process.

5.3 Release and Deployment Management

NTT DATA's change management practices include a blending of the ITIL framework for both change management and release management. As part of the scope of services, NTT DATA will define an approach in accordance with the ITIL framework to track, manage, install, plan, test, deploy, and verify releases. This approach will be mutually agreed with the MSI/VITA approving authority. During the transition, our approach to categorize a release will be defined and documented. NTT DATA intends to leverage the MSI-provided ITSM system to track release and manage release records. The Service Leads will assign a Single Point of Contact (SPOC) for each requested release which is under NTT DATA's scope of service.

Our approach to track and manage a lifecycle of a release is depicted in **Figure 13**.

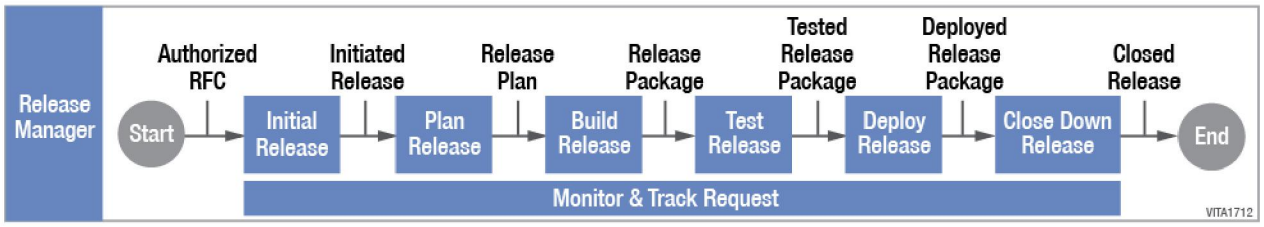


Figure 13. Release and Deployment Management – As a parallel activity to change management, all releases are thoroughly tested and approved before being scheduled for deployment in the IT environment, mitigating risk

NTT DATA will measure service performance before and after the release of a new service to verify that the new service is performing as designed. NTT DATA will be able to rapidly identify issues and quickly apply corrective actions before they significantly impact the service or business. We will employ risk mitigation practices by duplicating the VITA environment in our Test Labs and Innovation Lab so that we are able to identify compatibility issues prior to releasing a new service.

These activities will improve the chance of successful releases that will meet their goals and consistently benefit the business and improve services. Our release management services will meet all of VITA's requirements for Release Management, Service Validation and Testing, Pre-Production Testing, and Post-Deployment Messaging Support.

5.4 Service Asset Configuration Management (SACM)

Configuration Management. ITSM and software license optimization solutions serve unique but complimentary business needs. ITSM solutions are being used to deliver services throughout the enterprise, across an increasingly complex and continually changing IT infrastructure, while meeting service level agreements. The focus is on IT operations and involves processes for configuration, request, incident, problem, capacity, and demand management, among others. Software license optimization solutions are focused on IT financial management, and address concerns related to software license compliance and control of ongoing software costs.

Configuration Management System. NTT DATA will use the MSI SACM tool in the ITSM, ServiceNow, to perform the asset management functions, including software license tracking.

License Management and Compliance. IT Asset Management (ITAM) software is designed to inventory all the hardware and software within an organization to aid decision-making regarding hardware and software purchases and redistribution. Typically, inventory, financial, and contractual data is discovered and maintained in a central repository to assist in monitoring assets throughout their entire lifecycle. Requests to purchase assets are handled through approval workflows, and the software handles acquisition details such as entitlement, chargebacks, and provisioning.

Benefits of integrating software license optimization and IT service management include:

- Increased operational efficiency and reduction in IT operational costs
- No additional costs for integration since this is already part of ServiceNow
- Improved end user satisfaction
- Enhanced ITSM functions such as Request, Change, Configuration, Performance and Capacity Management via the data provided through the solution
- Proactively minimized license compliance risk
- Reduced software license costs

Software license agreements and license models are highly complex. It is difficult for Customers to control costs and derive maximum business value from software while trying to maintain compliance with licensing terms. Enterprises are frequently out of license compliance for some vendors and applications, and over-subscribed for others.

Achieving a high level of software license optimization maturity requires:

- Extensive discovery and inventory capabilities across multiple platforms and virtual environments for both legacy and modern applications
- Automated and accurate application recognition and data normalization
- Automated purchase order processing utilizing a Stock Keeping Unit (SKU) library
- Support for a wide range of complex license models

- License reconciliation considering purchase orders, contracts, installation, and usage data
- Software product use rights and/or detailed usage analysis
- Predictive 'What-If' Analysis to understand the impact of IT environment changes on software licensing, including the financial effects of the change

Our software license optimization solution, provides the above capabilities, which allows organizations to:

- Maintain continuous license compliance to reduce software audit risk and avoid unbudgeted expenses
- Consolidate vendors and applications
- Optimize license consumption to reduce ongoing software spend
- More effectively negotiate software contracts
- Proactively manage software licenses throughout the product lifecycle

5.5 Knowledge Management

NTT DATA will leverage the MSI-provided knowledge management system to recommend and provide information, while the MSI will publish and maintain knowledge and the knowledge management system. NTT DATA will participate in the formulation and deployment of a knowledge management strategy for the messaging services, subject to consultation and approval from the MSI, to identify relevant service management and governance knowledge and the data and information that support this knowledge.

Our knowledge management process requires that the knowledge articles managed by NTT DATA are updated and periodically reviewed in the MSI-provided knowledge repository. NTT DATA will use the MSI's Knowledge Management System (ServiceNow) that conforms to the knowledge management taxonomy for NTT DATA's scope of services.

The overall approach and steps of the knowledge management process which NTT DATA will perform (for NTT DATA scope of services only) is depicted in **Figure 14**.

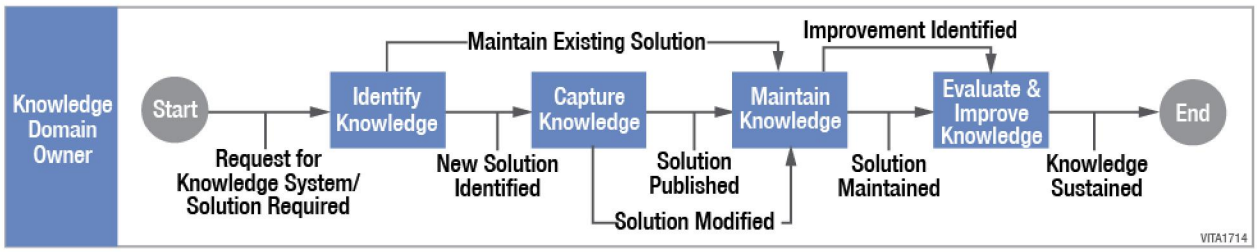


Figure 14. Knowledge Management Approach provides both self-help for low-level issues as well as problem solving on more critical tasks to quickly pinpoint the results our clients demand

Training and Education. NTT DATA has at its disposal a robust internal training catalog, and a broad set of training providers that augment our internal training offerings for our employees. We continuously invest in our employees by requiring 40 hours of training per employee. Our leadership approves continuing education requests, especially when they are career enhancing or help with the performance of their current duties. Our training and education offering includes granting certification requests, such as A+ Certification.

NTT DATA knowledge management services will also meet VITA requirements for Document Data Store, Contract Management, Site Information Management, and Customer Information Management.

6.0 Service Operation

NTT DATA will provide all of the services required to fulfill the requirements for service operation services (event, incident, problem, request and access management) and meet the service levels for messaging services on a 24x7x365 for VITA Customers.

6.1 Service Desk

NTT DATA will be implementing a Tier 2/3 service desk for our Messaging Services. We will be providing the Tier 2 and Tier 3 support services for VITA Customers and will utilize the MSI's Service Desk module in their ITSM tool, ServiceNow. When the Tier 1 Service Desk, run by the MSI, receives a ticket (incident or request), they will assign it to the Messaging Services Tower if it is a Messaging Services related service request. A manager in the appropriate Tier 2 service desk (based on information in the ticket) will review the Service Request and assign it to a Service Technician in the appropriate services group.

All assigned NTT DATA technicians will utilize ServiceNow to update any information regarding the service request, including any additional details about the incident or request, a log of every contact with the requestor(s), and when the request is resolved and closed.

All service level-related metrics will either come directly from ServiceNow and be updated by our technicians, or automatically generated from one of our tools. Any hand-offs to or from another Service Tower will be automatically logged.

Our Service Level Management and Process Management personnel will analyze incident and request trends from the accumulated and aggregated ticket information in ServiceNow and identify potential areas of improvement, possible problems that need to be addressed, areas of concern for service level performance, and recommend courses of action for remediation or service improvement.

6.2 Incident Management

NTT DATA will follow and cooperate with the existing, defined incident management system in place today with the MSI, utilizing and updating the MSI's ITSM service management tool. NTT DATA will work within the existing incident management framework to restore service as quickly as possible with the least impact to the client's business. We will follow established service levels, escalation, and priority guidelines and our Service Leads will monitor overall incident management, working to minimize backlog and aging tickets.

For high severity issues, our Service Manager will participate with the MSI in the existing major incident management process.

The incident management process will capture, document, manage, and resolve any disruptions of services. The primary goal of incident management is to restore service as quickly as possible with the least effect on business operations. All service issues initiate the incident management process, whether reported via direct contact with the service desk (phone call, email, or web portal), detected by automated monitoring systems, or identified by a technician.

To provide the most efficient service restoration possible, the incident management process captures pertinent information about the service issue, determines its severity, and initiates automatic notification and tracking mechanisms. The NTT DATA Tier 2 service desk within each service area on our team will assign incidents and

accounts for a number of factors including the messaging platform, incident nature, and specific features or applications involved. When necessary, vendors are engaged to assist in incident resolution.

Severity levels, functional and hierarchical escalation procedures, and notification schedules are established for timely communication to the NTT DATA service and VITA teams responsible for service restoration and business impact analysis. For high-severity service issues, a major incident manager is responsible for keeping all parties (NTT DATA, the MSI and MSS, VITA, third-party vendors, or others) informed of the situation and status of resolution of the issue. This allows the service team to focus on resolving the issue and restoring service as quickly as possible, while minimizing any adverse effects on business operations.

To facilitate the management and reporting of SLAs, our enabling technologies include a robust set of automatic notification and escalation procedures built into each process and tailored to each Customer. The notifications and escalations schedule—along with accountability matrices—are defined within the workflow processes to demonstrate that appropriate parties are automatically notified when a service issue triggers a notification.

Figure 15 shows our general version of the incident management process that would be used. NTT DATA will work with the MSI to define the specific process for VITA.

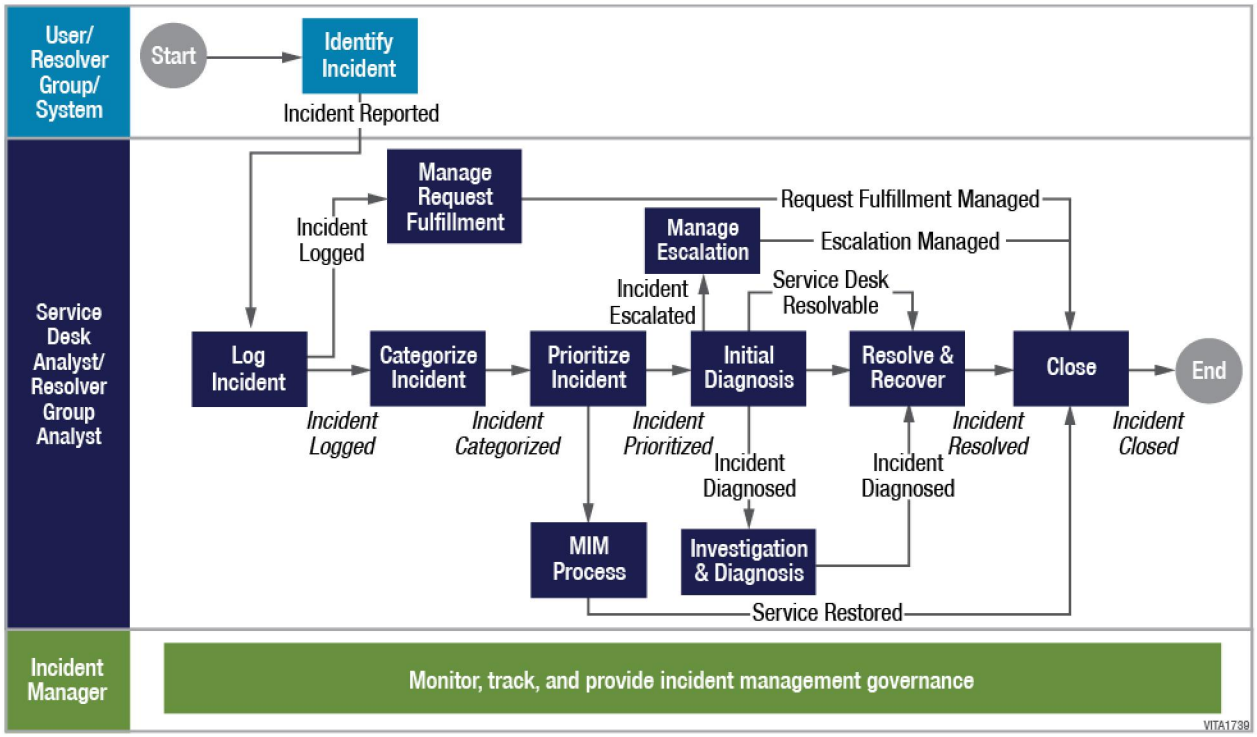


Figure 15. NTT DATA will our tailor incident management process to follow and integrate into the MSI's incident management approach using ServiceNow

6.3 Event Management

NTT DATA will utilize our Infrastructure and Cloud Monitoring System, along with our Splunk implementation we will closely integrate with ServiceNow to correlate events and respond to incidents under a single Service Ticket. NTT DATA will analyze the event data as part of this approach and perform root cause analysis to eliminate or mitigate future occurrences.

Event Management encompasses the entire lifecycle of an event It is foundational to operational monitoring, control, activities coordination, and operational procedures required to handle an event. Event Management practices include:

Event occurrence detection, event triage, event correlation and suppression notification, event remediation and event closure are all event-based topics. As an example, at GTA, we analyze event trend reports and identify trends that cause recurring problems to resolve them with the MSI. NTT DATA will apply the same techniques at VITA to root out broad, event-based problems to lower ticket volume and improve Customer satisfaction.

6.4 Problem Management

NTT DATA will leverage our experience with delivering Problem Management services to our clients by aligning our processes with the MSI Problem Management framework and providing value immediately. For instance, we have gained some lessons learned to quickly determine potential pitfalls when starting new engagements, especially when there is an MSI involved. At GTA, we focused early on our Program Implementation to clearly arrive at a joint definition with the MSI on what constitutes a problem, or which organizations identify new problems, and begin the Problem Management process. At VITA, we will work with the MSI to define these areas early in our engagement so that we will work smoothly together and to avoid the delays that could negatively impact VITA or VITA's Customers,

NTT DATA will comply with and participate in the established problem management framework managed by the MSI. Problem management deals with the identification, management, and resolution of problems that affect service quality and efficiency. Problem management initiated from within incident or change management or begins with the identification of a trend of incidents with some commonality or a realization that incidents may be symptoms of a deeper problem in the enterprise systems' environment. NTT DATA's Service Leads or a problem manager will collaborate with the required SMEs within NTT DATA to generate a Root Cause Analysis (RCA) and conclude with a recommendation, which may be a quick fix, a workaround, or a Request for Change (RFC) to a configured item in the environment. The Service Leads will participate in regularly scheduled problem management meetings with all service providers to prioritize the resolution of problems.

If major problems are identified, the information will be included in a ticket and will trigger our Major Problem Management process. This will inform our Tier 2/3 support teams to assign more resources that are identified as having greater expertise in the problem area. Essentially, a "Tiger Team" is instantly created and they are tasked with resolving the major problem as quickly as possible. Once the problem has been resolved and the change in service has been transitioned, the Tiger Team will be disbanded.

NTT DATA will validate that problem resolution and corrective actions taken are sufficient to address the root cause and that problems do not reoccur in the same or similar environments or under similar conditions. This includes the update of manuals, procedures, and other documentation. The Service Leads will escalate to appropriate management if corrective actions are not being taken, or as directed by the service integrator.

Figure 16 shows NTT DATA's general problem management process. We will work with the MSI to tailor the process to comply with their requirements and problem management process.

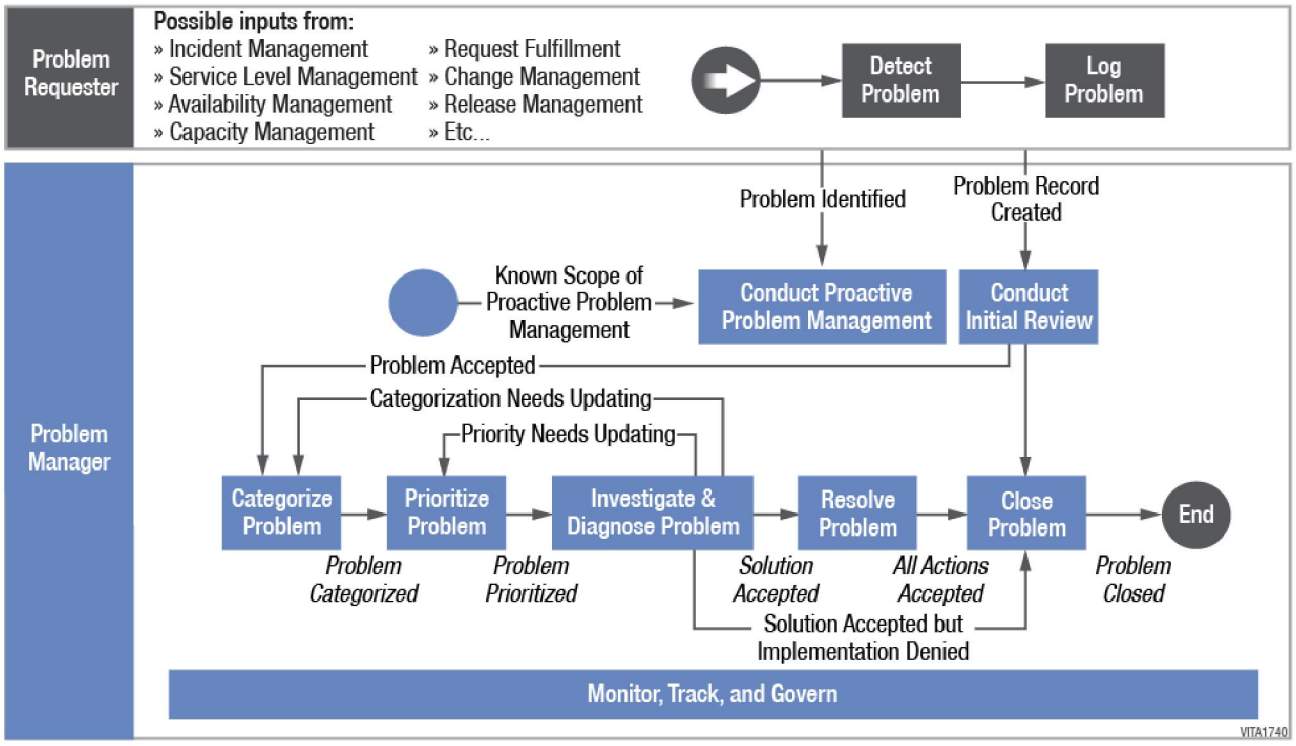


Figure 16. NTT DATA's general problem management process incorporates ITIL best practices to quickly and effectively solve problems and prevent their recurrence

6.5 Request Management and Fulfillment

NTT DATA intends to continue to utilize the established MSI-provided request management and fulfillment framework for the NTT DATA scope of service requests.

The automation, workflow, and approval mechanism that resides in the ITSM tool provides all necessary support and information to accomplish requested tasks. NTT DATA will track the progress of service requests that are under our scope of services to handle the service requests effectively and on time. NTT DATA will also keep the ITSM tool updated to reflect the status of each request.

Request management processes allow the service teams to deliver highly standardized services efficiently and improve overall end-user satisfaction with IT services. Response times and service level expectations will be set and measured per type of request configured. **Figure 17** shows NTT DATA's general Request Management process which we will tailor to the MSI's process.

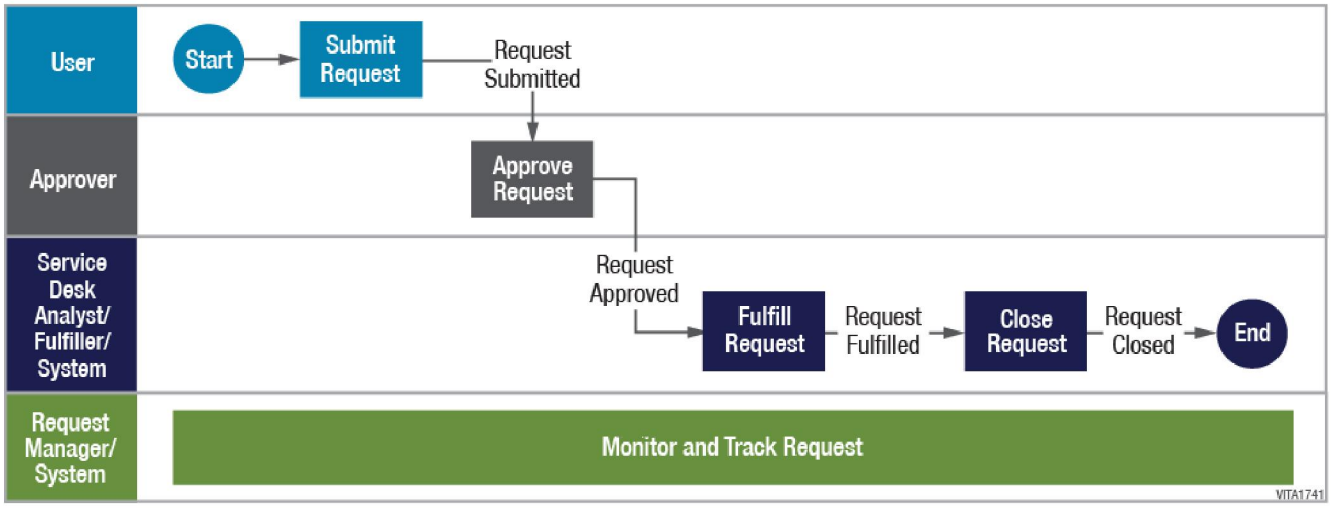


Figure 17. Request Management Process – NTT DATA's Request Management Process improves overall end user satisfaction with IT services through efficient, highly standardized services.

6.6 Access Management

The NTT DATA access management processes and procedures will make sure that only authorized users have access to facilities and systems based on their specific needs. These processes and procedures will be developed in conjunction with and approved by the MSI and VITA, as needed, and we will use the MSI Access Management System. We will provide them the capability to manage access to systems, networks, data, and software, as well as similar capabilities to manage their physical access to designated facilities. NTT DATA will use the MSI's identify access management system and the MSI's policies and procedures to provide VITA the necessary capabilities to grant access to their users.

Our Business Relationship Manager (BRM) will proactively collaborate with the MSI, VITA and the agencies to determine who will have the rights to manage access for their users, be provided views and reports of what access levels their current users have for what assets. The BRM will also correlate and determine which users should no longer have access rights to those assets. Our BRM will notify NTT DATA team members responsible for managing those rights on our end and verify that they have coordinated with the appropriate parties to provide the capabilities needed and approved by VITA.

Automation needs to be to be maximized to improve the accuracy of access rights and the quality of the information in the access management system. NTT DATA will work with the MSI and provide recommendations for areas that have potential risk for inadvertent access rights, and help identify automation approaches and solutions, integration with other business systems and improved logging to reduce the risk of unauthorized access, and verification that users have access of "least privilege" or "least authority." This helps to verify that users can use the systems that help them do their job, but only have as much access to them as they really need.

6.7 Supplier IT Operations

NTT DATA will have personnel that will work side-by-side with MSI and other Service Tower personnel to monitor the VITA infrastructure, provide our services through the VITA Data Centers, and provide network connectivity to those services in the Data Center for offsite users. We will coordinate closely the planning and

scheduling of any changes to VITA's environment, including software patches on devices that affect other parts of the IT infrastructure.

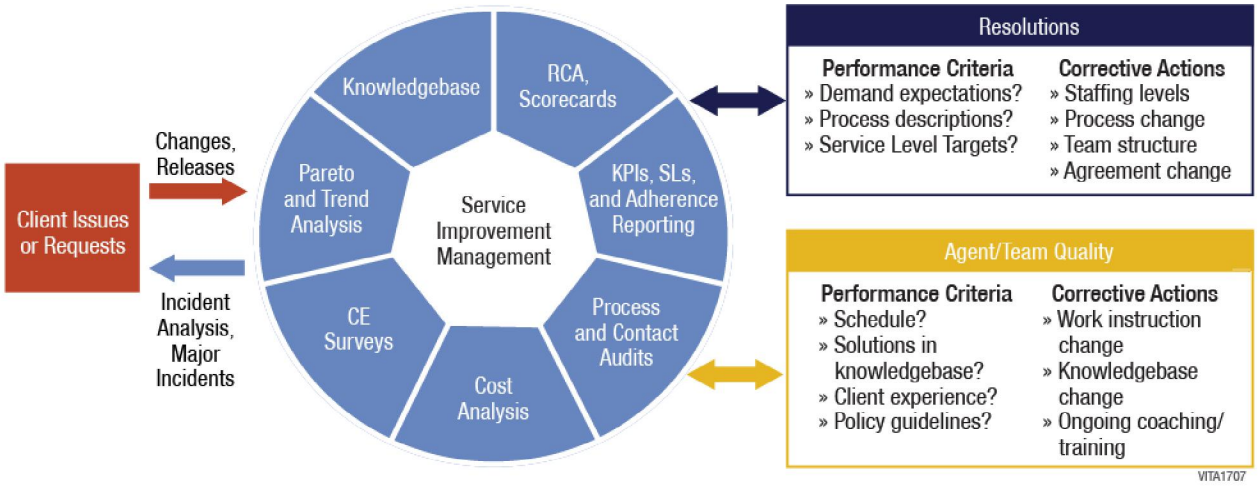
NTT DATA will work with the MSI to develop and deploy a software distribution and patching approach that meets MSI and VITA change and release management requirements for the messaging services related software, and provides the visibility for upcoming software changes required by MSI and the other Service Towers.

NTT DATA will collaborate closely with the MSI and Service Towers to determine potential impacts and work with them to mitigate risks to the VITA infrastructure.

7.0 Continual Service Improvement

NTT DATA has included a set of transformation initiatives and an innovative approach to provide continuous service improvement in our services for VITA. While NTT DATA has an established CSI approach, we will integrate it with the MSI's approach so that we are consistent across the Service Towers and the MSI will have an enterprise view of CSI initiatives and impacts to VITA IT services.

CSI is a core element in the process, underpinning the other stages in the lifecycle. As such, NTT DATA has processes to apply CSI in the service areas we provide to VITA. This is an ongoing activity, not a one-off activity at the start of a contract with our clients. This ongoing analysis leads to quality improvements, process optimization, and cost reduction.



Continual improvement is a core part of IT Infrastructure Library (ITIL).

Figure 18. Service Reporting Identifies Areas for Improvement – Year-over-year productivity stems from deep, long-term engagements where identified trends and dependencies transforms into actionable improvement

Our CSI methodology is Lean/Six-Sigma driven and is supported by our Center of Excellence for Six-Sigma that consists of Black Belt practitioners that conduct training (virtual and classroom) and act as mentors to staff undertaking projects.

Through mechanisms incorporated into our proposed governance framework, all our clients undergo monthly review with RCA and continual improvement processes. Account checkpoints are performed at regular intervals. This involves the analysis of account statistics and reviews of performance and ticket data to produce a dashboard for the account. This is backed up by specific activities required to improve areas that have been

identified through the analysis. Statistical data drives decisions that reduce Total Cost of Ownership (TCO) and create operational effectiveness.

These review sessions additionally assess our performance in terms of service metrics and trends to VITA and define and enhance future services. They are also designed to function as a high-level forum to facilitate dialog regarding the relationship, including mutual accomplishments, goals achieved, potential improvements, and recommendations.

7.1 Service Review and Reporting

NTT DATA shall provide service level management and reporting as well as monitors the efficiency and effectiveness of the operations. NTT DATA shall also monitor program performance against program performance levels, including KPIs, by systematically and regularly:

- Monitoring all performance levels for those that are not maintaining the pace required to meet the performance threshold—we shall examine root causes, perform risk mitigation/preventive action, and develop a corrective action plan
- Reviewing aging reports for all issues that are close to or have exceeded the resolution target
- Generating daily operational reports monitoring against service levels at a given time
- Monitoring KPIs that contribute to meeting a service level; for example, we measure how long it takes us to acknowledge a service desk incident, and if it takes us three hours to acknowledge the issue with only four hours to resolve it, we will surmise the SLA will not be met
- Monitoring alerts, such as incident resolution times, automatically generated by the ITSM Platform system
- Reviewing performance trend data to highlight performance trends

NTT DATA will execute a formal corrective action planning process for deficiencies discovered during reviews. We assign each corrective action to an owner for resolution and provide oversight to the process by our Service Manager.

NTT DATA will provide a metrics-driven continuous improvement approach focused on improvements to ITIL service delivery and service support to achieve increasing levels of performance against SLAs.

NTT DATA will use a standard approach, including use of automated tools/processes, combined with trend data for monitoring and root cause analysis, to identify the high priority areas for improvement and take immediate action.

NTT DATA will use the MSI's ServiceNow ITSM reporting capabilities and will develop all required reports and reporting formats and templates according to VITA and the MSIs specifications.

Example of dashboard and reporting functionality that is commonly provided are below. NTT DATA will work with VITA, MSI and Customers to establish final requirements during implementation in order to customize the reporting as needed.

Dashboard Function	Description	Available per Agency	Frequency of Update
Breakdown of licensed users	This dashboard will provide insight into how licenses are being consumed and will include the following data elements: • Number of active users • Number of newly activated users on a given timeframe • Number of users that have new RUs on a given timeframe • Number of terminated or removed RUs on a given timeframe	Yes	Daily
Environmental statistics	This dashboard will provide insight into the performance of the environment and will include the following data elements: • Number of email messages sent for all users • Number of email messages sent outside the environment • Number of encrypted messages sent • Number of email messages received • Unique users logged in and did things	Partially	Daily
Security insights	This dashboard will provide insight into the environments security and will include the following data elements: • Number of files stored in user or team cloud storage • Number of files shared externally/internally • Number of DLP Events overall a. Number of DLP events resulting in encryption b. Number of DLP events resulting in content block c. Number of DLP events via SMTP d. Number of DLP events via endpoint	Partially	Daily

	e. Number of DLP events via secure web gateway • Number of failed login attempts • Number of suspicious logins • MS and Google Cloud security reports • Number of threats that have been blocked by the platform a. Email phishing threats b. Malware Blocked c. C2 DNS queries d. Business email compromise • Number of spam messages blocked		
Service availability	This dashboard will provide insight into the services and their current availability. It will provide the below data: • Message delivery times (Avg, fastest and longest) • Their availability over time • Incidents (over time, MTTR) • Request completion time • Number of requests created over time	Partially	Daily

7.2 Process Evaluation and Currency

NTT DATA will utilize our proven business process engineering tools and methodologies to support the MSI's process improvement initiatives. NTT DATA is a recognized leader in business analysis and business process engineering (BPE). We have significant experience providing these services as stand-alone projects or as part of a larger solution effort. To accomplish these tasks, our analysts use the business process improvement approach shown in **Figure 19**.

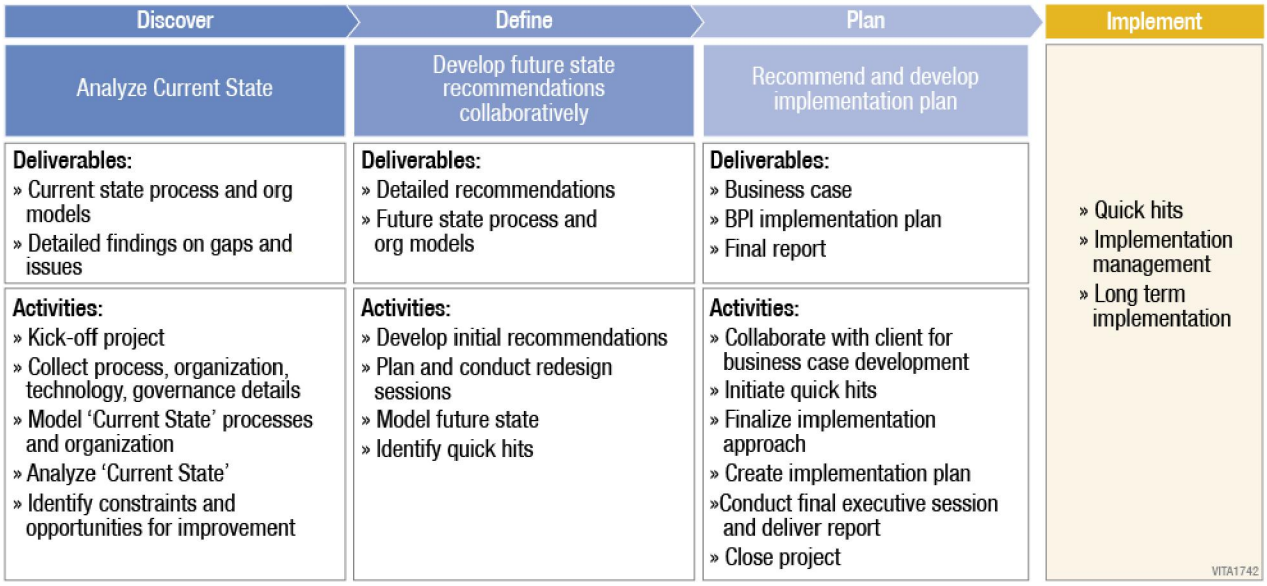


Figure 19. NTT DATA's Approach to Business Process Engineering includes examining processes and making recommendations for improvement while documenting requirements to validate strategies are in alignment

The approach has three fundamental phases: Discover, Define, and Plan. We have used this approach with our skilled personnel successfully at the Department of Homeland Security, the FBI, as well as other federal states, and local governments agencies to help create, revise, and deploy new processes and document detailed requirements while identifying assessment criteria so that processes work as planned.

Using our approach or the preferred approach of the MSI, we will analyze existing processes, measure performance, identify areas of improvement, and develop or support process improvement activities.

7.3 Service Measurement

NTT DATA will provide monitoring and measures that will help manage the improvements to our performance over time, as per the guidance of the MSI and in coordination with it. NTT DATA will work with the MSI to identify program measures that will show how we are meeting VITA's objectives for Messaging Services, such as service delivery improvement, innovation, and transparency, to name a few. Our technical solution will provide the type of end-to-end service information to augment the MSI's ITSM. Measures that show performance across functions will provide more meaningful data to the MSI and VITA so that they are assured that their messaging services provider is delivering the value and Customer satisfaction they demand from their Supplier.

Examples of measures with which NTT DATA has had proven success include:

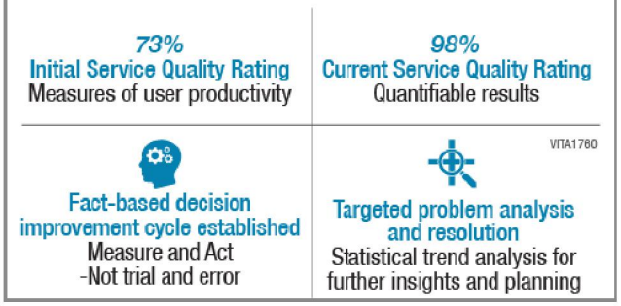
- **Net Promoter Score (NSP)** – NSP is an alternate but effective method for measuring Customer satisfaction. By measuring the likelihood of Customers recommending a service provider to someone, it provides a very tangible measure of satisfaction beyond whether someone liked a provider or their service. By focusing on gaining "promoters" and decreasing "detractors," it drives us to identify where the improvements need to come from to drive our score up (this comes from other targeted surveys, for instance) and helps influence our strategy and CSI program.

- **Innovation Program Impacts** – Include measures such as "Productivity Improvement," "Customer Service Improvement," and "Customer Experience" to provide insight into the effectiveness of innovations that we roll out to our Customers. We time our measurement programs to coincide both pre- and post-implementation of an innovation (or any new service for that matter) to determine whether the innovation is having the desired effect for VITA or COV Customers.
- **Transparency** – Surveys of the MSI, VITA, and perhaps even the Agency stakeholders and end users inform VITA and the MSI on the effectiveness of our transparency effort. Questions such as:
    - Were you able to access the Supplier's data that you wanted?
    - Was it easy to get to?
    - Was it timely?
    - Was it accurate?
    - Was it easy to interpret?
    - Was backup data provided to support claims?

When collated across a broad audience it provides a good indication on whether stakeholder expectations for transparency are being met.

NTT DATA's CSI initiatives resulted in a 24% service quality improvement for a US national healthcare business service provider

NTT DATA provided Messaging Services Analytics and expert analysis that delivered optimized virtual desktop user profiles, reduced logon durations, and provided fact-based rationalization for VDI system enhancements. Messaging Services Analytics also enabled fact-based infrastructure investment planning with benchmarks for measured the results.



NTT DATA will provide Quality Assurance services such as the ones that we list below and that we typically offer to our Customers. We will collaborate and coordinate with the MSI to respond to the actual responsibilities that will be defined.

Quality via ITIL: NTT DATA has a long and well-established history of transforming the ITIL best practices into operational procedures and processes to create a unified global services organization. Our commitment to ITIL is evident in the fact that most of the thousands of infrastructure solutions employees at NTT DATA have received formal ITIL training. As a result, our global service teams use a common vocabulary, workflow, organizational structure, and reporting system that enable us to consistently deliver high quality services to meet diverse Customer requirements worldwide. The benefits of ITIL best practices become available to our Customers once they have transitioned to the NTT DATA Enterprise Service Management (ESM) architecture and carry across every ITIL-based process and each service line.

Far from using them as a foundation alone, NTT DATA continually adapts and improves our ITIL-aligned service management approach to deliver services faster and more reliably. For example, we have incorporated the implementation of changes (release management) into change management processes, leveraging advanced technologies to perform release management efficiently and accurately. We have also added request management to the IT service management processes to facilitate predefined workflows and procedures for frequently requested services.

Quality Standards and Cost Leadership: Quality is an integral part of all we do at NTT DATA. We are improving our value chain and cost leadership and being responsive to Customer needs—faster and more cost-efficient from start to finish—by using best practices from industry-leading quality programs, as shown in **Figure 20.**

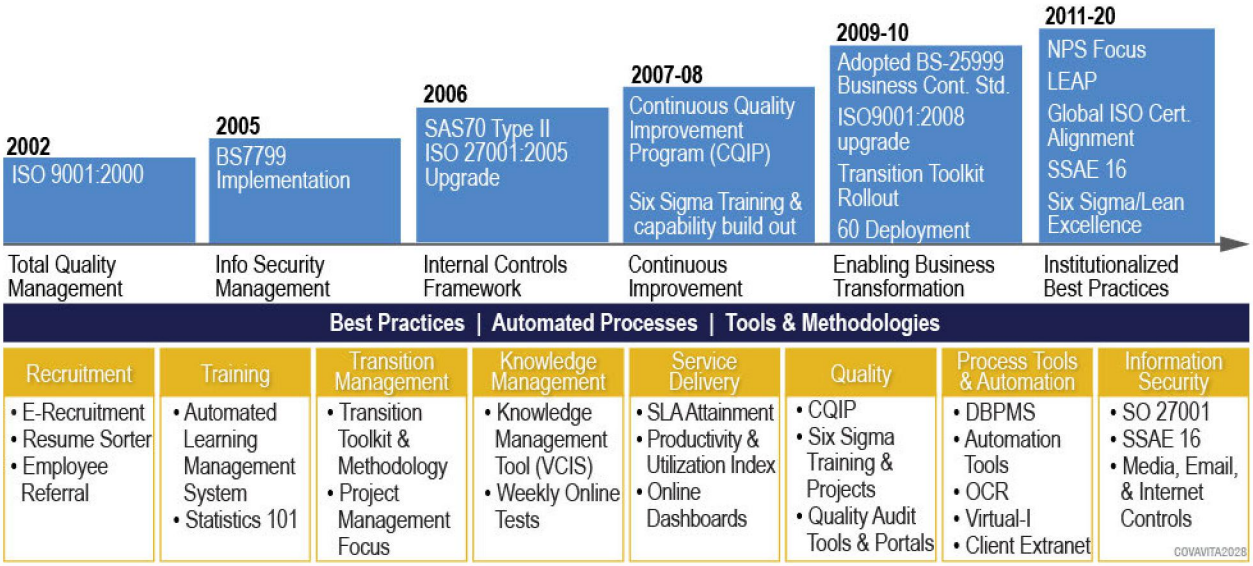


Figure 20. NTT DATA focus on quality includes using best practices from a wide variety of industry-leading quality programs

Regulatory Compliance and Certifications: NTT DATA understands the importance of regulatory compliance in all aspects of business operations—infrastructure, technology, business process operations, and application software. NTT DATA has maintained applications in highly regulated industries, including healthcare and financial services. While each industry has a unique set of compliance challenges, we have found that certain approaches provide the most value to our Customers. As such, we find a team-oriented approach to regulatory compliance is the most effective.

In these scenarios, our Customers assume responsibility for the business drivers, legal mandates, published schedules, and guidelines. We monitor the industry to stay abreast of forthcoming regulations, so we are prepared and knowledgeable. Our Customers provide guidance and direction to us about upcoming changes, requirements, and timelines. NTT DATA assumes responsibility for incorporating the necessary updates/enhancements to application software and process flows. Through a dedicated enterprise regulatory compliance officer, enterprise compliance teams, and intra-unit compliance representatives and programs, we also maintain the variety of certifications needed to operate within certain industries. These include healthcare, banking, and insurance—some of the most highly regulated industries in the marketplace.

We have an established internal audit services department, which is responsible for examining and evaluating our activities as they relate to Customer information security policies. This is an independent group that will periodically monitor and report any issues to the assigned client executive for remediation. Our internal audit services department will evaluate whether the processes for control, as they have been designed and represented by management, are adequate and functioning in an effective manner to validate the following:

- Adequate protection of VITA's resources
- Compliance with applicable regulatory guidelines (e.g., HIPAA, SOX)
- Accuracy and reliability of significant financial, managerial, and operating information
- Achievement of contractual obligations to VITA and to NTT DATA
- Compliance of employee actions with the following:

- VITA and NTT DATA policies, standards, and procedures
- Applicable laws and regulations

We are committed to stringent quality standards in business processes, services, and Customer satisfaction. This is reflected in our quality assurance process—our strategy, management, and metrics—as well as in past and present certifications we have earned.

Throughout the NTT DATA global organization, we are focused on quality and have development centers assessed at the following quality certifications:

- CMMI-Dev 1.3 Maturity Level 5 (current highest quality certification)
- CMMI-SVC V 1.3 Maturity Level 5
- ISO/IEC 20000-1:2011 (IT service Management for hosted services)
- ISO 27001:2013 (information security)
- ISO 9001:2008
- AS Rev 9100 C (aerospace domain)
- ISO 13485:2003 (healthcare domain)
- TL 9000-SV, R5.0/R4.5 (telecommunications domain)

NTT DATA global audit team audits, Sarbanes Oxley (SOX) audits, daily process audits, organizational QMS and other audits that are required through our NTT DATA processes. Our development and reliability teams also have additional audits and certifications specific to their product roles.

7.4 Improvement Planning

Planning for future improvement is a key aspect of CSI. Upon identifying improvements to services, tools, and processes, or if the MSI has identified future improvements, NTT DATA will collaborate with the MSI to plan the implementation of new improvements by using our Service Transition framework. We will work with the MSI to identify areas impacted new improvements to services that impact messaging services, as well potential impacts to the MSI or other Service Towers.

Our Improvement Planning activities are led by the PMO Lead. As such, NTT DATA will integrate the MSI's Continual Service Improvement Framework (CIF) into our CSI approach and include improvement planning as part of our project portfolio planning process. Service Improvement Programs (SIPs) will be managed and distinctly tracked as part of our project portfolio and prioritized based on the inputs and guidance from the MSI for allocating resources and determining timing for SIP projects.

7.5 Technical Innovation

Integral to the NTT DATA program management methodology is the innovation framework, summarized in **Figure 21**. In our experience, proactively casting a wide net for innovative ideas—from industrywide trends and insights to collaboration with MSI and VITA organizations—accelerates the pace of innovation and engages employees.

We follow a five-step process for the management of ideas: Discover, Assess, Propose, Design, and Execute. This process, based on ISO:9001 standards, has been applied at many of our IT service delivery programs, including

one of our Centers for Disease control and Prevention contracts. By integrating innovation into our overall cadence, we sustain innovation for the entire period of performance and gain efficiencies.

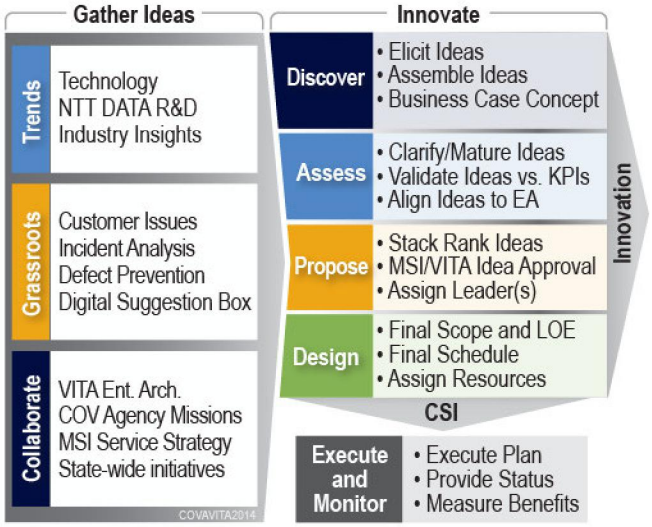


Figure 21. NTT DATA's Approach to Innovation includes examining industry-wide trends, OEM product plans and VITA operational requirements.

To achieve meaningful results in a timely fashion and aligned to VITA needs, joint leadership participation will be required. Specific program operations and resource commitments appear below.

The Innovation Plan consists of the following activities and investments:

- **Executive Sponsor**: Supplied from each company to co-chair the program and executive steering committee.
- **Innovation Executive Steering Committee**: Typically, a four to six-person panel comprised of VITA and Agency leaders participating on a Quality and Innovation Advisory Council, plus NTT DATA leadership.
- **Quality and Innovation Advisory Council:** Present options of new or modified services that add business value by better enabling the Agencies to achieve their mission.
- **Innovation Core Team**: Typically, a flexible six to 10-member team including consistent representation from the executive steering committee, daily operations staff, and service consumer representatives (Agency resources). Expanded participation by key technical representatives and program management office resources attend according to specific program needs.
- **Innovation Summits**: Semi-annual gathering of the core team, business leaders, capability development specialists, and invited guests based on topics of interest.
- **Market Advisory Services**: Information sharing of trends, directions, signals, and observations of drivers of change and their potential impact on VITA's business as input into the formal Business Opportunity Plan.
- **Business Opportunity Plan**: Documents the inventory of the identified and prioritized business challenges, opportunities, and desired outcomes, from which the innovation core team creates and maintains its innovation roadmap.
- **Innovation Roadmap**: Documents relevant ideas, opportunities, and solutions in each of the four stages of implementation: consideration, under construction, operating, and optimizing.
- **Capability Development Exposure**: Access to NTT DATA's development activities and resources to provide input and influence current and future offerings.

The innovation core team is the operational entity of the Innovation Plan and is responsible for the execution of the Innovation Plan. The core team presents to the innovation executive steering committee solutions, opportunities, ideas, business cases for resource consideration, and sponsorship.

Specific responsibilities include:

- Create, prioritize, and maintain the innovation log, which is an inventory of the identified business challenges, opportunities, ideas, and desired outcomes
- Plan and schedule the periodic innovation summits
- Create and maintain the innovation roadmap
- Identify and facilitate opportunities to meet with NTT DATA's service development leaders and experts to provide input and influence current and future offerings
- Identify and facilitate opportunities to access NTT DATA solution centers

Monthly, the innovation core team will:

- Monitor the general progress of the parties' performance under the Innovation Plan
- Identify business challenges, opportunities, and VITA's desired outcomes
- Identify potential solutions and improvements
- Identify areas of improvement for the Innovation Plan
- Meet to review business challenges, opportunities, ongoing projects, and resolve any outstanding issues

7.6 Technical Currency

We will work with our SaaS messaging service suppliers (Google and Microsoft) and supporting software vendors as well as the MSI and VITA to establish a Messaging Services Technical Currency Roadmap (MSTCR) for VITA's technology refresh program and to maintain technical currency at VITA. The MSTCR provides the path forward for transitioning to next generations of methods for messaging services from today's email, calendar, archiving, mobile device/application management, security components, contacts, online storage, productivity suites and collaboration services to the enhanced office productivity solutions of the future. This encompasses all the service, software, financial, and contractual aspects of providing messaging services throughout the period of performance. The MSTCR will be integrated into the MSI's ITSM and will provide the transparency to the MSI and VITA of technology refresh plans, status, costs, and activities.

NTT DATA will monitor the product roadmap of our service and software providers as well as competitors and their related components and inform the MSI and VITA of potential impacts to technical currency. New product offerings that change consumption of messaging services have the ability to rapidly impact technology plans and affect what is considered technically current.