

Corrective Action Plan

August 28, 2009

Prepared for:



Virginia Information Technologies Agency
Meadowville Technology Park
11751 Meadowville Lane
Chester, VA 23836

Prepared by:

NORTHROP GRUMMAN

Northrop Grumman Information Systems
Meadowville Technology Park
11751 Meadowville Lane
Chester, VA 23836

Table of Contents

1.0 Executive Summary 1

1.1 Completion of Transition Activities 2

1.2 Progress to Date 2

1.3 Transition Scheduling, Reporting and Coordination 3

1.4 Northrop Grumman/Commonwealth Governance 7

1.5 Assumptions..... 8

2.0 Background 9

3.0 Transition Activities..... 12

3.1 Infrastructure Projects 12

3.2 Capstone 17

3.3 CIA Milestones 18

3.3.1 Completed Milestones..... 18

3.3.2 Remaining Milestones..... 21

3.4 Transition Scheduling, Coordination, and Reporting 22

3.4.1 Scheduling Approach..... 22

3.4.2 Agency Coordination..... 23

3.4.3 Reporting..... 24

3.4.4 Predictive Failure Analysis..... 25

3.4.5 Root Cause Analysis..... 26

3.5 Unplanned Agencies 26

3.6 Transition Completion 26

3.6.1 Completion Measurement..... 27

3.6.2 Deferred Work Process..... 28

3.6.3 Excluded Work Process 28

4.0 Program Organization and Governance Structure..... 29

4.1 Northrop Grumman VITA Program Organization..... 29

4.2 VITA Organization..... 30

4.2.1 Service Management Organization..... 30

4.2.2 Customer Account Management 31

4.3 Governance..... 31

4.3.1 Northrop Grumman – VITA Governance 32

4.3.2 Northrop Grumman – Commonwealth Agency Governance 33

4.4 Escalation Process..... 36

5.0 Assumptions, Constraints, and Dependencies 38

5.1 Assumptions..... 38

5.2 Constraints 39

5.3 Dependencies 39

6.0 Attachments 40

Attachment A – Capstone A-1

Attachment B – Capstone Wave 1 Schedule..... B-1

Attachment C – Transformation Project Plans..... C-1

Attachment D – Agency Dashboard Reports D-1

Attachment E – Agency Waterfall Summaries E-1

Attachment F – Agency Waterfall Details F-1

List of Figures

Figure 1-1 Progress Made on Key Transformational Activities 3

Figure 1-2 Rolling Wave Planning Approach..... 4

Figure 1-3 Schedule of Completion of Major Infrastructure Towers 5

Figure 1-4 Near-term Agency Transformation Completions..... 6

Figure 2-1 Program Phases..... 9

Figure 2-2 Progress of Transformation since Q3 2008 11

Figure 3.1-1 Infrastructure Project Timeline 13

Figure 3.1-2 2006 Detailed Transition Plan Completed Projects..... 13

Figure 3.1-3 2006 Detailed Transition Plan Projects In Process..... 15

Figure 3.1-4 Projects Initiated and Completed Subsequent to 2006 Detailed Transition Plan 16

Figure 3.1-5 Projects Initiated and In Process Subsequent to 2006 Detailed Transition Plan 17

Figure 3.2-1 Capstone Rolling Wave Planning Approach 17

Figure 3.3-1 Milestone Timeline..... 18

Figure 3.3.1-1 Completed and Accepted Milestones..... 18

Figure 3.4.2-1 Near-term Agency Transformation Completions..... 24

Figure 3.4.3-1 Standard Reports 24

Figure 3.4.4-1 Agency-Specific Dependencies..... 25

Figure 3.6.1-1 Completion Measure Process 27

Figure 4.1-1 Northrop Grumman VITA Program Organization 29

Figure 4.2-1 VITA Organization Supporting Transition..... 30

Figure 4.3.1-1 Northrop Grumman – VITA Governance Roles and Responsibilities 32

Figure 4.3.2-1 Northrop Grumman – Agency Governance Roles and Responsibilities 34

Figure 4.4-1 Escalation Process..... 36

1.0 EXECUTIVE SUMMARY

Northrop Grumman is unwavering in its commitment to successfully transition executive agencies of the Commonwealth of Virginia to a modern, robust managed services environment. This Corrective Action Plan provides a high-level, yet comprehensive, approach to how Northrop Grumman will cooperatively work with the Commonwealth and its executive agencies, in particular VITA.

By leveraging the lessons learned during the first three years of performance of the Virginia IT Partnership, as well as the increased familiarity and collaborative work with VITA and the Commonwealth executive agencies, we have high confidence that this plan can be executed within the schedule it provides. The plan incorporates:

- A high degree of coordination with Commonwealth executive agencies and VITA on dates and criteria
- The substantial progress made to date, with performance improving as the partnership progresses
- Improvements in critical processes that will promote quick decision making and collaboration among all the constituents in this process
- Implementation of a new Agency Deployment Manager (ADM) model that enables direct communication between the agencies and Northrop Grumman managers who are empowered to take quick action and resolve schedule issues.
- A detailed schedule that includes agency dependencies and time for sign-off and acceptance.

Northrop Grumman is on track to complete a significant number of agency transformations in the next few months. This plan defines the activities required to complete transition, transform the remaining agencies, and bring the entire Commonwealth's IT infrastructure under a managed services umbrella.

Background

On October 25, 2005, the Virginia Information Technology Investment Board (ITIB) selected Northrop Grumman for a ten-year partnership to modernize the Commonwealth's information technology (IT) infrastructure and services. The ITIB recommended a three-phase approach to the transformational process; planning, transition and service delivery.

Northrop Grumman successfully completed all of the activities within the Planning Phase necessary to achieve Operational Readiness for the Service Commencement Date (SCD) of July 1, 2006. That marked the start of both the Transition and Service Delivery phases of this transformation.

VITA and Northrop Grumman originally estimated that the Commonwealth's IT transformation would be completed by June 30, 2009. In October 2008, the two partners recognized and announced that, due to a number of factors and unforeseen complexities, the transition phase would likely not be completed by that date.

On June 30, 2009, VITA notified Northrop Grumman that the company had not completed the Transition Phase activities and asserted that Northrop Grumman was in breach of its contract with the Commonwealth. The Commonwealth's notification further requested that Northrop Grumman submit a detailed explanation of how it plans to correct its departure from the original 2006 Detailed Transition Plan and complete the transformation, detailing the tasks to be performed by each customer agency and Northrop Grumman's approach for managing those tasks. The corrective plan was to be provided for VITA's review and approval within 60 days.

Northrop Grumman responded to the Commonwealth's June 30, 2009 letter with a letter dated July 7, 2009, in which Northrop Grumman stated that it did not agree that it was in breach of its contract. Northrop Grumman's letter further stated that the Commonwealth had significantly expanded the scope of agency transformation beyond the contract baseline, requiring Northrop Grumman to implement transformation within a complex web of agency-specific cultural and business practice needs far beyond the level of customization contemplated in the contract, that Northrop Grumman had achieved only limited success in obtaining agency commitment to operate in a standardized managed infrastructure and

support for the transformation and that these changes by the Commonwealth and agency resistance to the transformation process had resulted in delay and added cost. While fully reserving its contractual rights and remedies, and without excusing any failure by the Commonwealth in fulfilling its contractual obligations, Northrop Grumman nevertheless advised the Commonwealth that it remained committed to performance of the contract and stated its intention to provide to the Commonwealth the requested plan to complete transformation and implement active management of the Commonwealth's IT infrastructure. This plan represents the fulfillment of that commitment and is submitted subject to all of the statements and reservations contained in Northrop Grumman's letter of July 7, 2009, which remain in effect.

1.1 Completion of Transition Activities

This plan, submitted to VITA on August 28, 2009, supplements and updates previous versions of the 2006 Detailed Transition Plan from this date forward. It describes the activities and processes that Northrop Grumman will follow to successfully complete the transition of IT services by the target date of June 30, 2010. Northrop Grumman understands the completion of the Transition Phase to be comprised of four key components, listed below. Section 3 of this plan addresses these components in detail.

Agency Transformations

Eighty-five¹ Commonwealth executive agencies, spread across 2,200 locations will be transitioned from their existing infrastructure to the modern, robust infrastructure defined in the Comprehensive Infrastructure Agreement (CIA).

Infrastructure Projects

Fifty-nine (59) projects that progressively build up IT solutions in the infrastructure will support system-wide managed services. Thirty-two (32) of these projects are complete, and 28 remain in process. Northrop Grumman will replace, operate, and manage more than 200,000 independent technology devices in managing these projects.

Capstone

Capstone, activities derived from CIA requirements, are a gauge for assessing Northrop Grumman's readiness to provide a managed service to the Commonwealth's agencies. This plan provides a listing of Capstone activities associated with transition completion and the evidence needed to demonstrate their completion.

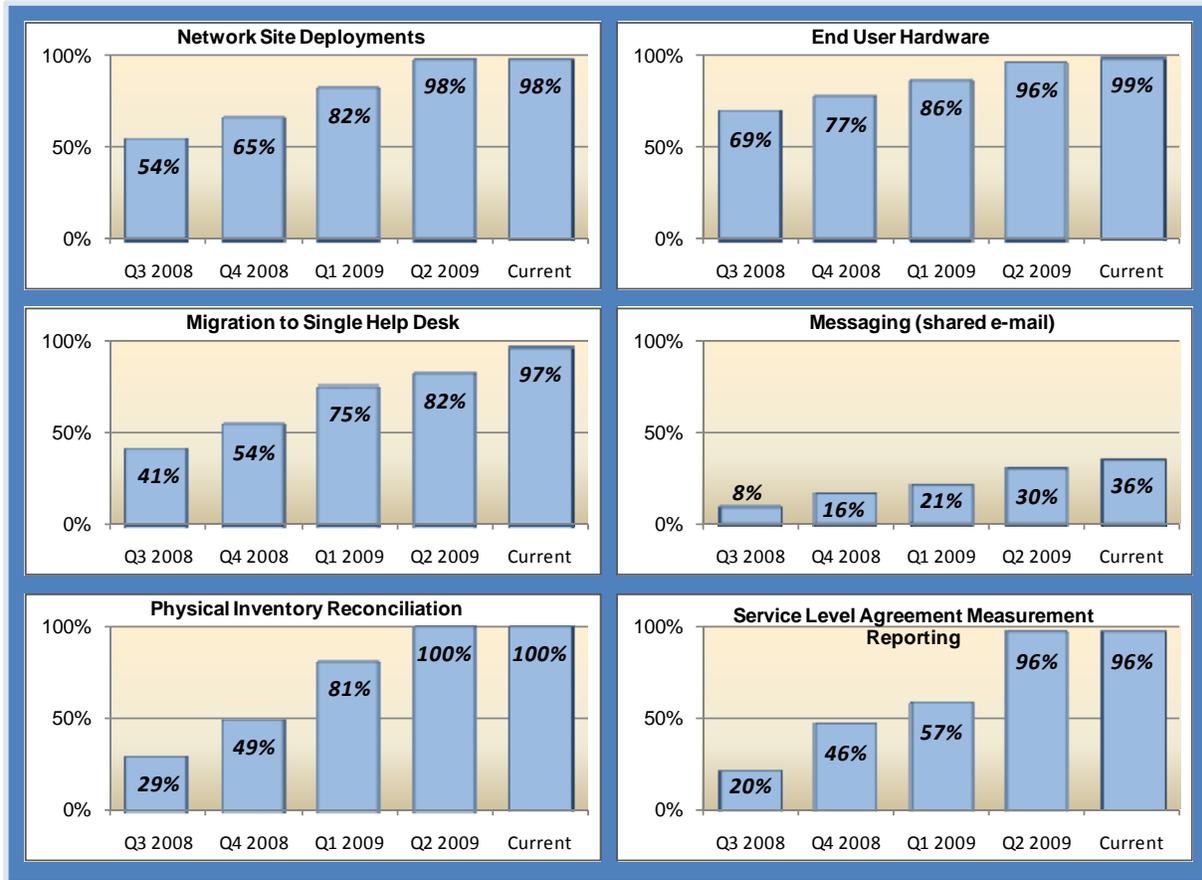
Milestones in the CIA

The CIA milestones provide VITA and the agencies insight into Northrop Grumman's activities as the transition progresses. Today, 92% of all milestones are complete and have been accepted by VITA.

1.2 Progress to Date

Northrop Grumman today provides managed services to all Commonwealth executive agencies, with some services provided on new infrastructure and some on their old infrastructure. Figure 1-1 demonstrates that much progress has been made in key transformational activities, including network site deployments, migration to a single help desk, physical inventory reconciliation, and end-user hardware.

¹ This plan assumes that there are 85 agencies to be transformed. This number of agencies represents 90 executive agencies, minus 4 agencies that have not been included this plan (see section 3.5), minus 1 agency to be closed by the Commonwealth.



VITA CAP 08-09-0001

Figure 1-1. Progress Made on Key Transformational Activities

1.3 Transition Scheduling, Reporting and Coordination

The success of this plan depends on collaboration of Northrop Grumman, VITA, and the executive agencies, and the reasonable cooperation of the Commonwealth with Northrop Grumman in the timely completion of all tasks required to complete transition. In order to achieve the objectives of this transformation, all involved parties must commit to and embrace the management approaches for scheduling, agency coordination, and reporting outlined in this plan. With this understanding, this plan provides realistic, achievable dates.

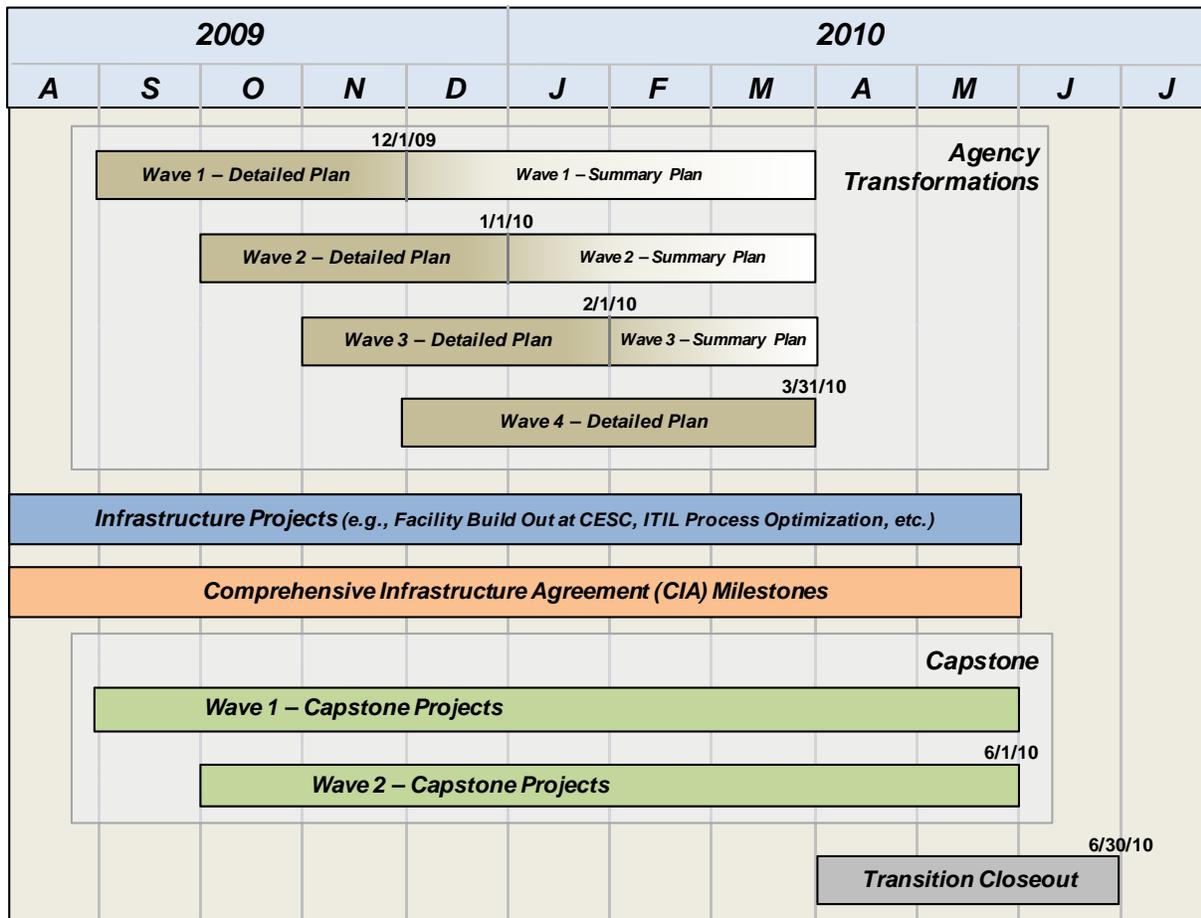
Risk Mitigation

It is Northrop Grumman’s intent to complete the preponderance of transformation activities by March 31, 2010 in order to complete agency closeout activities by June 30, 2010. Northrop Grumman has built 90 calendar days of reserve into its overall schedule to allow for technical and business challenges similar to those encountered to date, to reflect lessons learned by all parties, and to mitigate the risk associated with factors not yet identified by Northrop Grumman. This reserve is not intended to address potential future changes in the Commonwealth’s requirements, such as agency changes in prioritization, additional work scope, or new services that might be required.

Integrated Master Schedule – Rolling Waves Schedule Approach

Given the complexities of the schedule, compounded by the complexities of individual agencies and their specific site requirements, Northrop Grumman will use a rolling wave process to plan, in detail, agency transformation activities, infrastructure projects, capstone projects, and milestone completion.

This plan presents the first wave of that process as well as a high-level plan of the remaining agency transformations, capstone projects, infrastructure projects, and completion milestones, with detailed plans for activities that will occur over the next three months – through the end of November 2009. This rolling wave planning approach is illustrated in Figure 1-2.

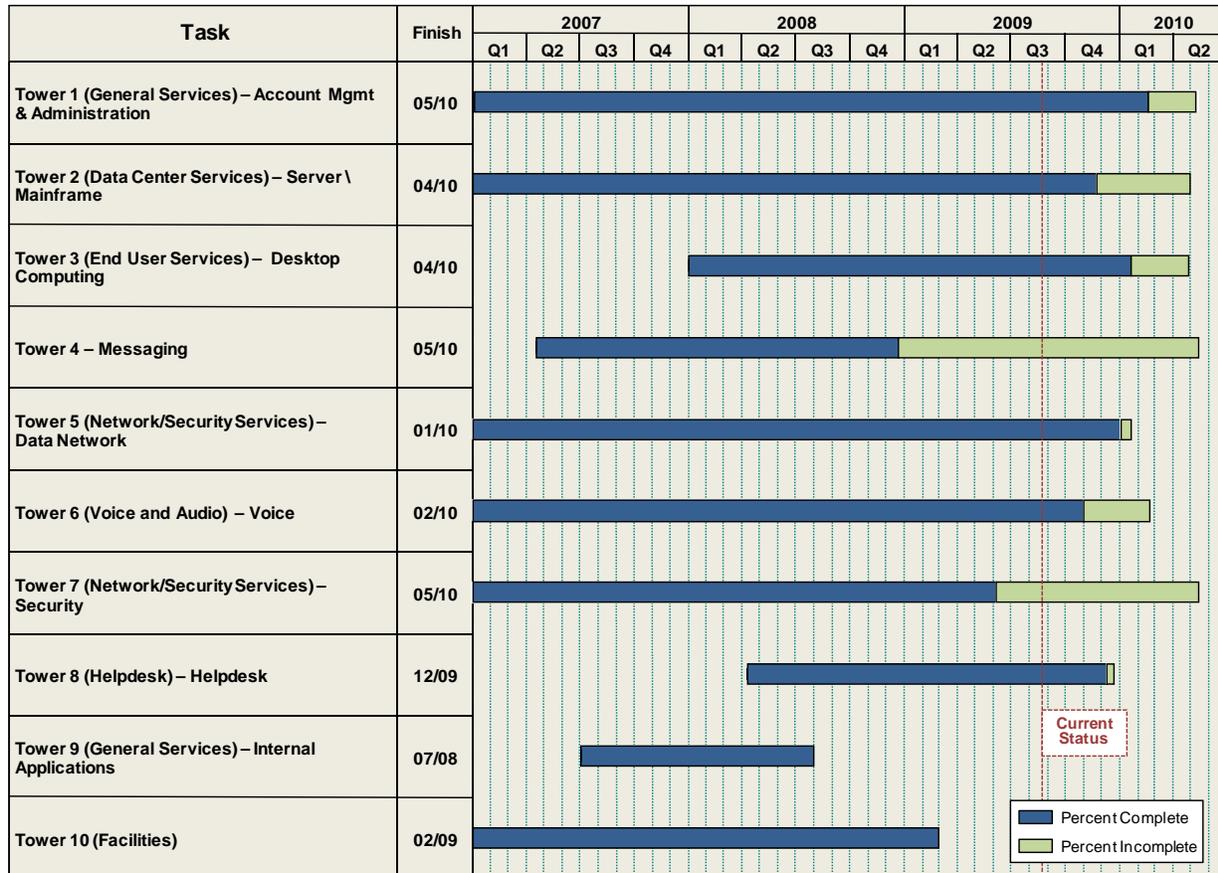


VITA CAP 08-09-0002

Figure 1-2. Rolling Wave Planning Approach

This plan is organized by the enterprise-level projects necessary to complete transition of services. Agency-specific detail is added to the enterprise plans, and detailed implementation plans either have been or will be negotiated with each agency. The tasks that those agencies must complete for each service area have been incorporated into the Integrated Master Schedule (IMS). The detailed schedule includes over 90,000 discrete activities, with more than 77,000 of those activities complete to date.

Northrop Grumman has planned, in detail, the transformation activities at 85 agencies as part of wave 1 presented in this plan. In the three subsequent waves, the balance of the agencies will be addressed at a greater level of detail, adding to the detailed schedules from previous rolling waves, including Wave 1. Northrop Grumman will work with VITA and each agency to coordinate and finalize its respective transition schedule. Figure 1-3 outlines the complete transformation of the major infrastructure towers by March 30, 2010, assuming that all executive agencies complete their tasks on schedule.



VITA CAP 08-09-0003

Figure 1-3. Schedule of Completion of Major Infrastructure Towers

Agency Transition Coordination and Transformation

Northrop Grumman continues to work with each executive agency to coordinate and finalize the transition schedule. This provides confidence that the schedule can be executed as planned. To execute this plan, Northrop Grumman will ask each agency to formally accept its schedule and acknowledge its commitment through its Agency Information Technology Representative. If scheduling or other planning issues present themselves and cannot be resolved, the plan calls for a formal escalation process. This escalation process recognizes that the successful transformation of Virginia’s IT infrastructure requires that all involved parties cooperate to agree upon and embrace a consistent process for the escalation of any unresolved issues. Section 4 details the standard cycle times for escalation decisions that will be used by Northrop Grumman in order to ensure the success of this plan.

Infrastructure Project Completion

Northrop Grumman has made significant progress in our 59 infrastructure projects. Today, 32 of these, or 54%, are closed. Figure 1-3 illustrates completion schedules, and percent complete for major infrastructure towers. This data is taken from Northrop Grumman’s integrated master schedule.

Agency Transformation Completions

The completion of these infrastructure projects enables Northrop Grumman to speed the progress of the largest agency transformations. As of August 21, 2009, Northrop Grumman is on track to complete 12 agency transformations in the next few months, as illustrated in Figure 1-4.

Agency	Desktop	Network	MDS	Server Inventory Install	eSupport	Re-IP	HPOV	Remote Control	Patch Mgmt	Security
DJJ	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
DHCD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DBA	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
BTRO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EDR	<input checked="" type="checkbox"/>									
HRC	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
DMBE	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
VDA	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
GH	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
CASC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
VRC	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
DOLI	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Element Complete
 Element In Process

VITA CAP 08-09-0004

Figure 1-4. Near-term Agency Transformation Completions

Predictive Failure Analysis

Northrop Grumman understands that scheduling conflicts or other issues may arise after an executive agency commits to its transformation schedule. This can cause the activities depicted in Figure 1-4 to move in time. Northrop Grumman continuously strives to be more proactive and predictive in its project planning and forecasting. We utilize predictive failure analysis (PFA) to assist in identifying events that could potentially impact timely project completion.

This is particularly useful in management of critical path activities. When these activities are threatened, the overall agency transformation can be impacted. Northrop Grumman has identified the most critical activities that must be performed during agency transformations, the sequencing of these activities, and the probable durations of these activities for an agency at specific agency sites. The agency-specific critical path, and the interdependencies with secondary and tertiary critical paths, is included in this plan. Knowledge of this critical path allows Northrop Grumman to build an integrated schedule that is realistic. This realistic schedule is the foundation of this plan.

Unplanned Agencies, Deferred or Excluded Work

By necessity, transformation of an agency's IT infrastructure will cause some level of disruption in agency operations. Since the CIA was signed, it has become apparent that some agencies of the Commonwealth – for sound business reasons – cannot readily be transitioned at this time to a new infrastructure and managed services model. Accordingly, agencies that cannot be scheduled for transformation have not been included in this plan. They will be addressed through contract means outside of this plan.

Deferred work is defined as work intentionally rescheduled, due to operational or business needs of an agency, by Northrop Grumman while awaiting conflict resolution or adjudication of other issues or

constraints that prevent the accomplishment of work as detailed in the agency's transformation schedule. Excluded work is defined as work intentionally removed from the agency's transformation schedule as a result of adjudicated schedule or requirement conflicts based on agency operational or business needs. It differs from deferred work in that excluded work is indefinitely removed from the transition and transformation. Excluded work may encompass minor or substantial subsets of agencies.

Work that is deferred or excluded will be subject to written agreement by VITA, the affected agency, and Northrop Grumman and removal from the completion criteria associated with transition or transformation for that agency. Deferred work will be re-planned, when practical, by Northrop Grumman, VITA, and the agency. Because deferred work is not intended to extend the completion date of transition. No work will be deferred to complete beyond March 31, 2010. If work is anticipated to be delayed beyond this date, the work must be re-planned to start sooner or the work must be excluded from transition. Northrop Grumman will develop and maintain the list of all deferred and excluded work and the written agreements associated with that work.

1.4 Northrop Grumman/Commonwealth Governance

The transition governance approach used by Northrop Grumman, VITA, and the agencies is described in this plan, which details Northrop Grumman's understanding of each party's responsibilities, areas of accountability, and escalation process, providing the framework for cooperation and collaboration that makes the on-time completion of the transition possible. It makes clear Northrop Grumman's responsibilities and obligations with respect to the transition and identifies elements of reasonable cooperation in the transition process that Northrop Grumman expects to receive from the Commonwealth in accordance with the CIA, section 3.2.2.

Northrop Grumman – VITA Governance

Northrop Grumman and VITA share responsibility for the management and completion of the transition, including all four transition components: Agency Transformation, Infrastructure Projects, Capstone, and Milestones. It is critical that VITA and Northrop Grumman successfully work with the agencies to cooperatively plan and manage the transformation to achieve the milestones as scheduled.

Northrop Grumman and Executive Agency Governance

Northrop Grumman has defined the transition leadership roles and responsibilities across five key areas of interface: transition schedule sign-off, transition issue resolution, project completion and acceptance, schedule delays, and status meetings. Our definition of roles takes into account lessons learned and best practices from transition activities accomplished to date. Effective, timely, and clear communication, coordination, and issue resolution among VITA, Northrop Grumman and each agency is vital to the successful transformation of agencies and completion of infrastructure projects that involve agency deployment elements.

Critical Responsibilities

In addition to the governance roles and activities, Northrop Grumman has identified the critical cooperation responsibilities that are essential to the success of transition projects. Northrop Grumman understands that it is responsible for the overall management of the transition phase. Additionally, the company is responsible for assuming overall management of the agency's IT infrastructure while it is undergoing transformation. As part of this responsibility, the company has implemented a number of actions to improve delivery of services in support of operational and agency performance:

- In early 2009, Northrop Grumman Information Systems assigned its chief information officer to the program full-time to leverage his extensive expertise in enterprise-level transformations.
- The company has added 15 agency operations managers (AOMs) to the team to increase direct communication between Northrop Grumman and agencies and to better understand the agencies' transformation issues.
- Northrop Grumman also worked with the agencies to establish an IT Change Advisory Board (CAB) to provide Northrop Grumman with agency advice and recommendations regarding proposed changes to the IT service offerings.

Northrop Grumman will continue to leverage resources from all appropriate areas of Northrop Grumman to complete transformation activities and increase program performance.

Northrop Grumman believes that VITA is responsible for gaining and ensuring cooperation by all Commonwealth entities in support of this plan. VITA is responsible to work with each agency to provide coordination between Northrop Grumman and the agency, ensuring the accuracy of agency information regarding completion dates, resource loading, sequencing of agency tasks, software, hardware, business events or dependencies not included in the initial transition schedule. This will allow Northrop Grumman to resolve events that may impact the transition schedule or to escalate items for deferral or exclusion, as appropriate.

The agencies are responsible for a number of critical elements of the transition, including: assignment of an agency point of contact for coordination of transition activities; providing timely feedback to Northrop Grumman and VITA on the transformation planning dates; completion, resource loading, and sequencing of agency tasks; accepting in writing the planned transformation schedule and the agency commitments; escalating to VITA/Northrop Grumman schedule conflicts that may cause delays to transformation and a number of other specific responsibilities.

1.5 Assumptions

This plan assumes that Northrop Grumman, VITA, and the agencies will work together to cooperatively plan and manage the transition. Such cooperation is both required by section 3.2.2 of the CIA and is a critical factor in achieving the transition milestones as scheduled. An effective governance model as detailed in this plan will be used to address any technical or business complexities that could create or cause schedule or technical impacts.

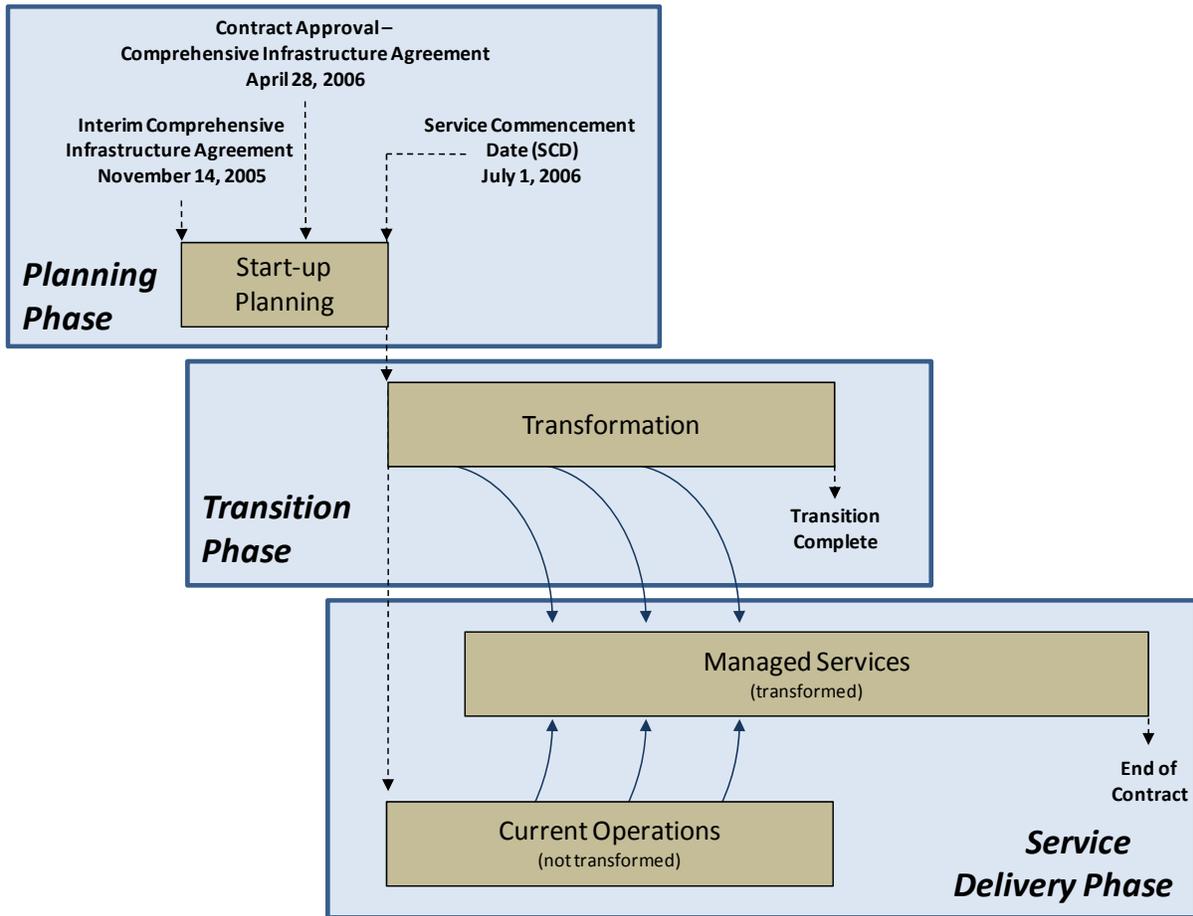
Through consistent collaboration, significant progress has been made over these past few months. As with any undertaking of this complexity, the success of transition requires full and timely cooperation between all parties: Northrop Grumman, VITA and the agencies. None of the three can accomplish successful transition without the other two.

Northrop Grumman is unwavering in its commitment to successfully transition agencies of the Commonwealth of Virginia to a modern, robust managed services environment. This plan provides a high-level, yet comprehensive, approach to how Northrop Grumman will cooperatively work with the Commonwealth and its agencies, in particular VITA. With the continued full commitment of Northrop Grumman, VITA and the agencies, this plan presents the detailed schedule and processes required for a successful transformation within the timelines referenced in this plan.

Moving the Commonwealth into a transformed, managed-services environment, and modernizing its infrastructure is an important step in fulfilling the vision of this partnership. We look forward to continuing our work with the Commonwealth to complete its IT transformation.

2.0 BACKGROUND

On October 25, 2005, the Virginia Information Technology Investment Board (ITIB) recommended Northrop Grumman for a ten-year partnership to modernize the Commonwealth's IT infrastructure and services. Northrop Grumman is proud to be working side-by-side with the Commonwealth's IT organization, VITA, in the transformation of Virginia's information technology environment. The ITIB recommended a three-phase approach to the transformational process; these phases and their interrelationships are shown in Figure 2-1.



VITA CAP 08-09-0005

Figure 2-1. Program Phases

Northrop Grumman successfully completed all of the activities within the Planning Phase necessary to achieve Operational Readiness for the Service Commencement Date (SCD) of July 1, 2006. That date marked the start of both the Transition and Service Delivery phases of this transformation.

The transition is comprised of four related key components. These are:

- Agency transformations. These are the 85² separate efforts to convert agencies from their existing infrastructure to the modern, robust infrastructure defined in the CIA. Transformation of agency infrastructure requires collaboration and support from every executive branch agency spread across 2,200 locations throughout the Commonwealth.

² This plan assumes that there are 85 agencies to be transformed. This number of agencies represents 90 executive agencies, minus 4 agencies that have not been included this plan (see section 3.5), minus 1 agency to be closed by the Commonwealth.

- Infrastructure projects. These are the 59 projects, such as *Facility Build Out at CESC* and *Enterprise Incident Management System Implementation*, that progressively build-up IT solutions in the infrastructure to support system-wide managed services. Once agencies are transformed, they will adopt and interface with these new managed services.
- Comprehensive Infrastructure Agreement (CIA) Milestones. These CIA Milestones are the contractual completion events defined in the CIA. Milestones provide the VITA and the Commonwealth's executive agencies insight into Northrop Grumman's activities as the transition progresses. Milestones are objective measures of Northrop Grumman's progress through transition in preparation for managed services. Today, 66 of 72 CIA Milestones are complete and accepted by VITA, representing 92% of all milestones contained in CIA section 10.1.2. Additionally, 13 of 15 Critical Milestones have been completed and accepted by VITA, representing 87% of all Critical Milestones contained in CIA section 10.1.2.
- Capstone. Capstone is a gauge used to assess the readiness of Northrop Grumman to provide a managed service to the Commonwealth's executive agencies. Through the Capstone initiative, Northrop Grumman and VITA have agreed upon Capstone as measures of progress toward transition completion and have agreed that Capstone will be placed in the Integrated Master Schedule (IMS).

Through the Transition Phase, Northrop Grumman has initiated a number of projects to deploy an infrastructure that will help the Commonwealth meet its 21st century IT goals. In addition to the completed transformation activities reflected in Figure 2-2, these projects have resulted in a number of significant successes:

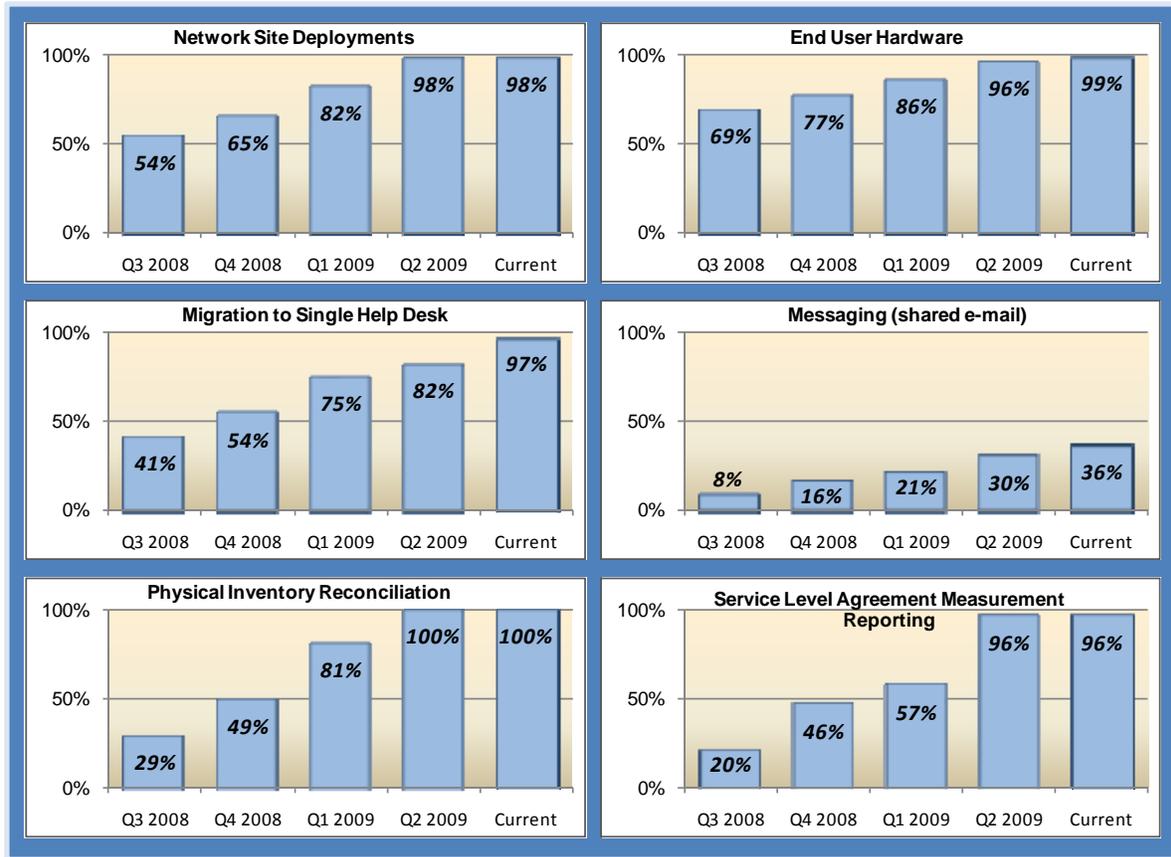
- The results of an investment of over \$270M of private funds to support transformation of the Commonwealth's IT environment from multiple, incompatible systems, inconsistent standards, aged equipment, and gaps in security to a modern, robust system that can facilitate government efficiencies.
- Construction completed on two custom-built, secure, state-of-the-art facilities to house critical IT infrastructure of the Commonwealth's executive agencies. This has included economic development through job creation, particularly in Southwest Virginia.
- Enhanced cyber security measures implemented for portions of the infrastructure that have been transformed, including forensic analysis to evaluate incidents.
- Physical IT assets identified and reconciled across the Commonwealth.
- A consistent and proactive approach to technology refresh.
- Substantial progress on the delivery of a transformed IT environment, both for agencies and the underlying infrastructure that supports managed services.
- Tools, structure, and governance model deployed to measure and objectively assess the operational performance of Virginia's IT infrastructure through Service Level Agreements (SLAs). These SLAs are in place today and being used to measure operational performance, providing a performance-based operations and management of the technology infrastructure.

The original plan, as expressed in the 2006 Detailed Transition Plan, was to complete the transformation by June 30, 2009, although VITA and Northrop Grumman cautioned publicly in October 2008 that completion would likely extend beyond that date. Significant progress has been made in transformation.

Within the Service Delivery Phase, Northrop Grumman has assumed responsibility for the operation of the Commonwealth's IT under a performance-based, managed services contract. Services delivery is underway currently in conjunction with the transformation activities, where during the month of July, 2009, Northrop Grumman measured 186 discrete service level agreements and met 97% of them.

Northrop Grumman is continuing to transform the outdated IT environment of these agencies to a managed services model that offers a modern infrastructure with established refresh dates, coordinated and consolidated service desk operations, high-speed network access, and centralized management of

server operations. During the managed services phase, performance will be measured through 193 discrete service level agreements. Figure 2-2 demonstrates that Northrop Grumman has made substantial progress over the past year against key transformation activities.



VITA CAP 08-09-0001

Figure 2-2. Progress of Transformation since Q3 2008

This plan is executable because it leverages the lessons learned during the first three years of performance of the IT Partnership. This plan includes the following improvements which will ensure success:

- A high degree of coordination with Agencies and VITA on dates and criteria
- Incorporation of recent actions taken across the program which have been demonstrated as successful in improving the quality of performance.
- Improvements made in various processes, such as issue escalation, will promote quick decision making and collaboration among all the constituents in this process
- A new Agency Deployment Manager (ADM) model which allows direct communication to the agencies and rapid feedback to managers within Northrop Grumman empowered to take action and resolve schedule issues.
- A very detailed schedule that includes agency dependencies and time for sign-off and acceptance.

Northrop Grumman is on track to complete a number of agency transformations in the next few months. This plan defines the activities that remain to complete transition, transform the remaining agencies, and bring the entire Commonwealth's IT infrastructure under a managed services umbrella.

3.0 TRANSITION ACTIVITIES

This plan contains corrective actions that Northrop Grumman will take to complete transition. This plan supplements and updates the 2006 Detailed Transition Plan. Northrop Grumman has updated and supplemented the original transition plan to help ensure the orderly and coordinated transition of services to the new infrastructure.

Northrop Grumman understands the completion of the Transition phase to be comprised of four key components, listed below.

- **Agency Transformations.** Eighty-five agencies, spread across 2,200 locations, will be transformed from their existing infrastructure to the modern, robust infrastructure defined in the Comprehensive Infrastructure Agreement (CIA). The bulk of this plan from section 3.4 onward describes the management approach and processes for transition scheduling, coordination, and reporting that will be used to complete this transformation.
- **Infrastructure Projects.** 59 projects that progressively build-up IT solutions in the infrastructure will support system-wide managed services. Section 3.1 lists the closed and open Infrastructure projects that, when complete, form the basis of managed service.
- **Capstone.** Capstone is a gauge used to assess Northrop Grumman's readiness to provide a managed service to the Commonwealth's agencies. Section 3.2 and Attachment A and B present a plan for using completion of Capstone to monitor the progress of the transition by including Capstone activities in the Integrated Master Schedule.
- **CIA Milestones.** Section 3.3 lists the CIA milestones completed and accepted by VITA as well as the plan to complete those milestones not yet accepted.

This section of the plan addresses each of these components in detail.

3.1 Infrastructure Projects

Northrop Grumman has defined a set of infrastructure projects which facilitate the successful completion of transition to managed services. The Commonwealth now enjoys the benefits of the execution of a number of these projects, including the following:

- The results of an investment of over \$270M of private funds to support transformation of the Commonwealth's IT environment from multiple, incompatible systems, inconsistent standards, aged equipment and gaps in security to a modern, robust system that can facilitate government efficiencies.
- Two new, modern, secure, and state-of-the-art data centers to house critical IT infrastructure of the Commonwealth's agencies.
- Consistent and proactive technology refresh for key elements of the infrastructure, such as desktops and servers, that form a more modern infrastructure
- Performance-based operations and management of the technology infrastructure which is measured through Service Level Agreements (SLAs). These SLAs are currently in place and being actively used to manage the network
- Economic development through job creation with over 190 jobs currently created in the Commonwealth.

The infrastructure project timeline runs the duration of the transition phase, as illustrated in Figure 3.1-1. Infrastructure projects have been on-going since the start of transition, with many of them complete. These projects are organized around the infrastructure services that are to be provided to the Commonwealth and are classified by functional area.

2009					2010							
A	S	O	N	D	J	F	M	A	M	J	J	
<i>Infrastructure Projects (e.g., Facility Build Out at CESC, ITIL Process Optimization, etc.)</i>												

VITA CAP 08-09-0006

Figure 3.1-1. Infrastructure Project Timeline

The figures below present the following information:

- Figure 3.1-2. The projects from the 2006 Detailed Transition Plan that are complete.
- Figure 3.1-3. The projects from the 2006 Detailed Transition Plan that are in process.
- Figure 3.1-4. Projects initiated and completed subsequent to the 2006 Detailed Transition Plan.
- Figure 3.1-5. Projects initiated and in process subsequent to the 2006 Detailed Transition Plan.

The completed projects represent progress made to date in the agencies’ transformation to a managed service. In total, there are 59 infrastructure projects with 32 of these complete

Project ID	Infrastructure Project Title and Description
Functional Area – Facilities/Mainframe	
TR002	<i>Facility Build Out at CESC</i> Completing construction of the Commonwealth Enterprise Solution Center (CESC) building in Chesterfield and readying for occupancy
TR003	<i>Facility Build Out at SWESC</i> Completing construction of the Southwest Enterprise Solution Center (SWESC) in Lebanon and readying for occupancy
TR044	<i>SWESC Migration/Setup</i> Establishing the primary help desk, backup CMO, and backup data center in the SWESC
TR013	<i>Staff Relocation from RPB to CESC</i> Completing the relocation of all VITA and Northrop Grumman staff from the RPB to the CESC prior to the end-of-lease for the RPB
TR005	<i>Mainframe Consolidation, Migration, and Move</i> Installing new VITA mainframe equipment and relocating workloads to the CESC
Functional Area – Messaging	
TR014	<i>Global Email Address List Synchronization</i> Establishing a common Global Address List (GAL) for the Commonwealth
TR034	<i>Quest Tools Implementation</i> Installing Quest tool set to support migration of the various Commonwealth messaging environments
TR048	<i>DNS/WINS Restructure Design, Planning, and Preparation</i> Establishing standardized name resolution for the Commonwealth enabling standardized Internet access
TR006	<i>Directory Service Implementation and Alignment</i> Establishing active directory services for the Commonwealth
TR007	<i>Enterprise Messaging Infrastructure Implementation</i> Establishing the Microsoft Exchange/Outlook 2003 hardware and software infrastructure and associated support services
Functional Area – Desktop	
TR054	<i>Altiris Backend Infrastructure installation and Configuration</i> Establishing the Altiris hardware and software infrastructure and associated support services
Functional Area – Security	
TR026	<i>Enterprise Interim Incident Tracking Solution</i> Design and development of the CSIRC policy, processes, and infrastructure

Project ID	Infrastructure Project Title and Description
TR021	<i>Security Certification and Accreditation Program Planning</i> Definition of requirements and preparing for an enterprise-level security certification and accreditation for the Commonwealth
TR028	<i>Vulnerability Assessment Program Implementation</i> Establishing an enterprise-level vulnerability assessment program for the Commonwealth
TR025	<i>CSIRC Build</i> Establishing the CSIRC hardware and software infrastructure and associated support services
TR022	<i>Transitional ESOC Design and Build Out at CESC</i> Establishing the ESOC hardware and software infrastructure and associated support services to manage security incidents from the CESC
TR023	<i>ESOC Build – SWESC</i> Establishing the backup ESOC hardware and software infrastructure and associated support services to manage security incidents from the SWESC
Functional Area – Server	
TR045	<i>Production Lab Design and Implementation</i> Establishing the lab infrastructure and associated support services enabling server testing and acceptance
TR004	<i>Server Consolidation, Migration, and Move Phase 1</i> Completing Phase 1 of the server consolidation and relocation activities
Functional Area – Internal Applications	
TR049	<i>Charge Back</i> Establishing Charge Back requirements, assessing available product solutions, developing a recommended solution that meets the requirements, and providing a project plan with projected cost and schedule to implement the recommended solution
TR050	<i>Internal Applications Organization Restructure</i> Assessing the current applications support staff, completing a skills gap analysis, scheduling training, and reorganizing the group to optimize performance
TR051	<i>Internal Applications CMMI Level 3 Migration</i> Training staff in CMMI concepts and procedures, modifying NGC CMMI processes and procedures to reflect VITA needs, and establishing a CMMI Level 3 support environment with associated processes and procedures
Functional Area – Cross Functional Services	
TR056	<i>Standard Operations Processes and Procedures Development Plan</i> Produce the plan for development of the Procedure Manual, and providing for continuous optimization of support processes and procedures
TR035	<i>Dashboard Development</i> Completing final design and implementing infrastructure, tools, and associated support processes for the program management dashboard
Functional Area – Network	
TR058	<i>Network Architecture Blueprint and Addressing Plan</i> Completing the final design for the network consolidation and network re-addressing that will establish an enterprise-level network for the Commonwealth
TR059	<i>Network Deployment</i> Completing the implementation of the network consolidation and network re-addressing that will establish an enterprise-level network for the Commonwealth
TR060	<i>NOC Implementation</i> Establishing the NOC infrastructure and associated support services in the CESC (primary) and SWESC (backup)
TR062	<i>VoIP Strategy</i> Completing the analysis and design for continued VoIP migrations within the Commonwealth (This project was closed as a result of contract amendment 47)

Figure 3.1-2. 2006 Detailed Transition Plan Completed Projects

Project ID	Infrastructure Project Title and Description
Functional Area – Messaging	
TR008	<i>Enterprise Messaging End-User Migration</i> Completing the migration of Commonwealth end-user mailboxes and messaging related information to the new Microsoft Exchange/Outlook 2003 environment Planned Completion Date: May 2010
Functional Area – Desktop	
TR016	<i>Building and Implementing the Product Configuration Support Center</i> Establishing the Product Configuration Support Center in South VA for desktop/server preparation, staging, and testing Planned Completion Date: April 2010
TR031	<i>E-Support and P-Synch Installation and Implementation</i> Establishing the Support Soft and P-Synch hardware and software infrastructure and associated support services Planned Completion Date: March 2010
TR055	<i>Altiris Component Installation</i> Installing the Altiris client and establishing associated electronic software distribution (ESD), asset discovery, and desktop management capabilities Planned Completion Date: April 2010
TR041	<i>Desktop Refresh Design, Planning , and Preparation</i> Design, planning, and preparation for the first desktop refresh scheduled for Jan 2007 through Mar 2009 Planned Completion Date: January 2010
TR012	<i>Print Consolidation</i> Analyzing the current printer environment, and performing a refresh/consolidation of selected printers using standard or multi-function network laser printers Planned Completion Date: February 2010
TR042	<i>Desktop Refresh Implementation</i> Implementation of the first desktop refresh scheduled for Jan 2007 through Mar 2009 Planned Completion Date: April 2010
Functional Area – Security	
TR027	<i>VITA – Security Dashboard</i> Establishing the policy, processes, and infrastructure for an enterprise-level security dashboard, identifying security incidents and status for the Commonwealth Planned Completion Date: April 2010
TR030	<i>Internet Secure Gateway Implementation</i> Establishing a secure and enterprise-level Internet ISP gateway for the Commonwealth Planned Completion Date: January 2010
Functional Area – Server	
TR015	<i>HP OpenView Implementation</i> Establishing the HP OpenView (full suite) infrastructure and associated support services, enabling network and server monitoring and management Planned Completion Date: April 2010
TR009	<i>Server Consolidation, Migration, and Move Phase 2</i> Completing Phase 2 of the server consolidation activities Planned Completion Date: January 2010
Functional Area – Help Desk	
TR047	<i>Enterprise Incident Management System Implementation</i> Establishing the Peregrine ServiceCenter hardware and software infrastructure and associated support services Planned Completion Date: December 2009
TR052	<i>Procedures Manual (originally titled Common Performance and Service Level Metrics and Reporting)</i> Produce the Procedure Manual to provide for continuous optimization of support processes and procedures Planned Completion Date: December 2009

Project ID	Infrastructure Project Title and Description
Functional Area – Cross Functional Services	
TR033	<i>Enterprise Asset Management Implementation</i> Completing final design and implementing asset management infrastructure, tools, and associated support processes Planned Completion Date: September 2009
TR053	<i>ITIL Process Optimization</i> Implementing core ITIL/ITSM framework processes to optimize support services Planned Completion Date: May 2010
TR037	<i>Site Survey Preparation and Execution (Tiger Teams)</i> Completing planning and implementing the Site Survey Tiger Teams that will visit every site, and collect the information needed by the network, server, and desktop project planners Planned Completion Date: October 2009
Functional Area – Network	
TR064	<i>Transition to MPLS Services</i> Completing the final design and implementation of the MPLS network for the Commonwealth Planned Completion Date: January 2010
Functional Area – Program Management	
TR036	<i>System/Service Integration and Management</i> Ensuring coordination and integration of Transition/Transformation activities Planned Completion Date: June 2010
TR018	<i>Communications Management Implementation</i> Providing continued support for program communications to VITA / Northrop Grumman employees, end-users, customer Agencies, and the Commonwealth citizens Planned Completion Date: June 2010
TR017	<i>Change Management Implementation</i> Providing continued support for program change management as necessary, reducing risk and the overall impact of technical and program changes on VITA / Northrop Grumman employees, end-users, customer Agencies, and the Commonwealth citizens Planned Completion Date: June 2010

Figure 3.1-3. 2006 Detailed Transition Plan Projects In Process

Project ID	Infrastructure Project Title and Description
Functional Area – Facilities/Mainframe	
TR061	<i>WiFi Build Project at CESC</i>
Functional Area – Server	
TR057	<i>ShareCenter</i>
TR011	<i>Print Consolidation (Mainframe)</i>
Functional Area – Voice	
TR067	<i>Audio-Data Conferencing</i>

Figure 3.1-4. Projects Initiated and Completed Subsequent to 2006 Detailed Transition Plan

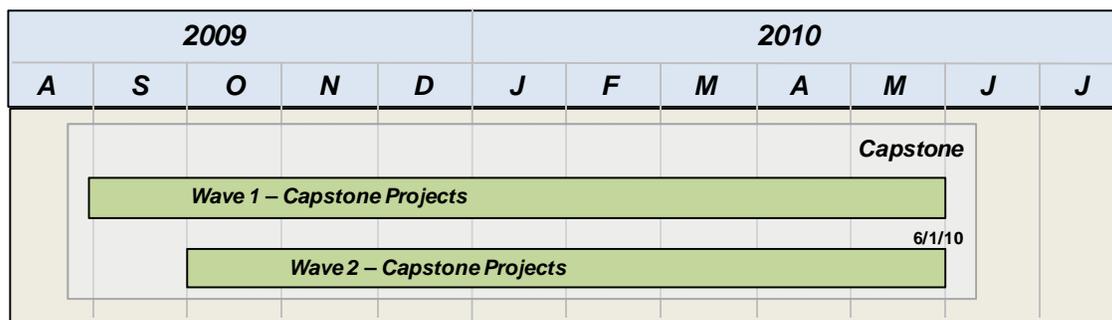
Project ID	Infrastructure Project Title and Description
Functional Area – Desktop	
TR070	<i>Blackberry Refresh</i> Planned Completion Date: December 2009
Functional Area – Security	
TR072	<i>Security Integration</i> Planned Completion Date: May 2010
Functional Area – Server	
TR068	<i>IP Re-Addressing Assessment and Preparation</i> Planned Completion Date: March 2010
TR065	<i>P2P Service Catalog</i> Planned Completion Date: January 2010
TR066	<i>SLA Performance Metrics Reporting</i> Planned Completion Date: January 2010
TR071	<i>Software Asset Management Lifecycle</i> Planned Completion Date: October 2009
Functional Area – Voice	
TR069	<i>Additional Audio/Data Conferencing Services</i> Planned Completion Date: January 2010

Figure 3.1-5. Projects Initiated and In Process Subsequent to 2006 Detailed Transition Plan

3.2 Capstone

Capstone activities, and the project to systematically review and monitor their completion, are one of the four related components of transition. These are a defined set of activities whose accomplishment helps assess the readiness of Northrop Grumman to provide a managed service to the Commonwealth's agencies. The Capstone project was initiated after the original 2006 Detailed Transition Plan. During this project, VITA prioritized the Capstone items into high, medium, and low priorities.

The high priority Capstone items will be accomplished as part of transition. The plan to accomplish these high-priority items will be presented in two waves. The first wave is included in this plan. The plan for the second wave will be delivered on October 1, 2009. This is illustrated in Figure 3.2-1 Capstone Rolling Wave Planning Approach.



VITA CAP 08-09-0007

Figure 3.2-1. Capstone Rolling Wave Planning Approach

Northrop Grumman will place our plan to accomplish the high-priority items in the Integrated Master Schedule (IMS) as a means of measuring the progress of the transition. The following will be scheduled and included as activities in the integrated master schedule (IMS):

- Evidence of Capstone completion.

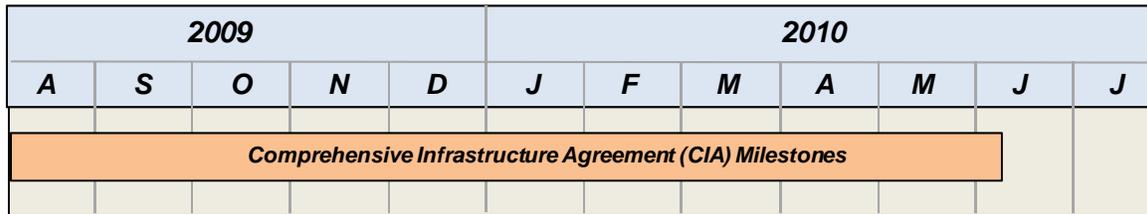
- VITA review activities with specific durations, setting the clear planning dates needed to support the transition completion schedule.
- Northrop Grumman update activities with specific durations following VITA reviews
- Sign-off activities with specific durations recording agreement that Capstone has been completed.

The complete listing of the high priority Capstone items that will be accomplished as part of transition is included in Attachment A – Capstone. The schedule of Capstone activities in Capstone wave 1 is included in Attachment B – Capstone Wave 1 Schedule.

Northrop Grumman will develop an On-going Operations Plan (OOP) to document its plan to accomplish the medium and low priority Capstone items. The OOP will be delivered to VITA no later than January 1, 2010. The OOP will document the plan to accomplish all medium and low priority Capstone items no later than December 31, 2010.

3.3 CIA Milestones

Milestones are identified in the Comprehensive Infrastructure Agreement (CIA). Milestones provide VITA and the Commonwealth’s agencies insight into Northrop Grumman’s activities as the transition progresses. The CIA Milestones run the duration of the transition phase, as illustrated in Figure 3.3-1.



VITA CAP 08-09-0008

Figure 3.3-1. Milestone Timeline

The milestones are objective measures of Northrop Grumman’s progress through transition in preparation for managed services.

3.3.1 Completed Milestones

Figure 3.3.1-1 provides a list of the CIA section 10.1.2 milestones that have been completed and accepted by VITA. Those marked in **blue** in the Milestone Number column (MS#) are critical milestones and are subject to the conditions described in Section 6.6 of the CIA. Sixty-six (66) of the 72 required milestones, or 92%, have been completed and accepted by VITA.

MS#	Milestone	Description
1	Service Commencement	Start of Service Delivery for all functional areas
2	Offer letters extended to VITA employees (Critical)	ITP Staff retention of VITA personnel
3	Knowledge Management System operational	Service desk knowledge management system operations initiated. Provides enhanced information sharing
4	Procedures Manual Plan	Provide schedule for Procedure Manual delivery
5	Procedures Manual (Critical)	Deliver the Procedure manual table of contents which includes existing VITA procedures, the "to be" plan for procedures, and gap analysis.
6a	Initial Disaster Recovery Test at SWESC	Conduct first Disaster Recovery Test executed at the SWESC. Demonstrates and effectively replaces the legacy backup and business resumption capability
6b	Final Disaster Recovery Test at SWESC (Critical)	Conduct final Disaster Recovery Test at the SWESC
8	Service Commencement	Start of Service Delivery for all functional areas

MS#	Milestone	Description
9	Infrastructure Operation Center (Interim) (Operational Implement HPOV at MCI for monitoring Server services)	Enterprise Infrastructure Server Operations Center implementation
10	Richmond Plaza Building Server consolidation in-place	Consolidation of existing servers in the Richmond Plaza Building (RPB) completed per approved plan. This activity refreshed the data center servers. Risk reduced for subsequent move to the Commonwealth Enterprise Solutions Center (CESC).
11	Move mainframe/server workload from Richmond Plaza Building to Commonwealth Enterprise Solutions Center	Relocation of mainframe and server (data center) workloads from the RPB to the CESC completed
12	Move infrastructure for disaster recovery to Southwest Enterprise Solutions Center back-up data center	Relocation of mainframe and server (data center) infrastructure (hardware) from the RPB (after workloads are moved to the CESC) to the Southwest Enterprise Solutions Center (SWESC) completed
13	Tape automation complete	Implementation of automated tape devices (STK or EMC), and conversion of tape data completed
14	Mainframe print consolidation complete	Implementation of approved plan to consolidate print functions from five existing print centers, with a primary goal to reduce the aging roll-feed printers
15	Server consolidation complete (25%) (Critical)	Achieve 25% checkpoint with implementation of approved plan to consolidate 2341 existing servers across the Commonwealth
16	Server consolidation complete (65%)	Achieve 65% checkpoint with implementation of approved plan to consolidate 2341 existing servers across the Commonwealth
18	Service Commencement	Start of Service Delivery for all functional areas
19	Desktop and asset management system operational	Complete the Altiris system installation, and provide operational procedures and a training plan to support program requirements for desktop management and asset management
20	Begin desktop refresh (Critical)	Establish the Desktop Staging Center, complete refresh plan, provide operational procedures, and train field staff to implement the refresh of 64,000 desktop hardware (or installation of image critical software on recently installed desktops) across the Commonwealth. Begin the refresh project.
21	Quarter 1 Refresh	Achieve 12% checkpoint with implementation of approved plan to refresh 64,000 desktops across the Commonwealth
22	Quarter 2 Refresh	Achieve 24% checkpoint with implementation of approved plan to refresh 64,000 desktops across the Commonwealth
23	Quarter 3 Refresh	Achieve 36% checkpoint with implementation of approved plan to refresh 64,000 desktops across the Commonwealth
24	Quarter 4 Refresh	Achieve 48% checkpoint with implementation of approved plan to refresh 64,000 desktops across the Commonwealth
25	Quarter 5 Refresh	Achieve 60% checkpoint with implementation of approved plan to refresh 64,000 desktops across the Commonwealth
26	Quarter 6 Refresh (Critical)	Achieve 72% checkpoint with implementation of approved plan to refresh 64,000 desktops across the Commonwealth
27	Quarter 7 Refresh	Achieve 84% checkpoint with implementation of approved plan to refresh 64,000 desktops across the Commonwealth
29	Service Commencement	Start of Service Delivery for all functional areas
30	Single agency-wide address list (Global Address List) Should be "Commonwealth-wide" (Critical)	Establish the necessary software linkages between the Commonwealth's legacy e-mail systems to enable complete address lists for all 64,000 In-Scope Commonwealth e-mail users, regardless of the email system that they are using
31	Backend Infrastructure In Place	Complete the installation of the Exchange messaging infrastructure (servers, systems software, storage systems, and support tools) in preparation of the messaging mailbox migrations
33	Service Commencement	Start of Service Delivery for all functional areas
34	Temporary NOC	Initial Network Operations Center implementation
35	Submit Arch Network Blueprint Addressing Plan	Architectural Network Blueprint finalized and delivered
36	Connectivity to CESC	Establish network connectivity to the CESC

MS#	Milestone	Description
37	Connectivity to SWESC	Establish network connectivity to the SWESC
38	15% LAN Migration	Achieve 15% checkpoint with implementation of approved plan to migrate "hot" ports from the legacy Commonwealth networks to the new MPLS network
39a	Enterprise NOC	Establish the Enterprise Network Operations Center (NOC) infrastructure and associated support services in the CESC to provide monitoring and management of the network segments that are visible from the CESC. The E-NOC will replace the VITA RPB NOC and T-NOC facilities, and will provide comprehensive network management as the new MPLS network is implemented.
39b	Final Enterprise NOC (Critical)	Completion of Enterprise NOC implementation
40	MPLS Core established, begin Agency migration (Critical)	Installation of the MPLS core network and LAN migration plan completed, and operational procedures established. Begin Agency LAN migration activities.
41	30% LAN Migration	Achieve 30% checkpoint with implementation of approved plan to migrate "hot" ports from the legacy Commonwealth networks to the new MPLS network
42	36% LAN Migration	Achieve 36% checkpoint with implementation of approved plan to migrate "hot" ports from the legacy Commonwealth networks to the new MPLS network
43	52% LAN Migration	Achieve 52% checkpoint with implementation of approved plan to migrate "hot" ports from the legacy Commonwealth networks to the new MPLS network
46	Service Commencement	Start of Service Delivery for all functional areas
47	Complete Site Surveys (large sites = 500 thru 2000 users)	Complete the survey of large agency sites
52	Service Commencement	Start of Service Delivery for all functional areas
53	Interim Security Incident Tracking and Management System	Tracking and reporting of security incidents using server and database as a back-end repository
54	Enterprise Security Operation Center (ESOC) transitional	Establish the transitional Enterprise Security Operations Center (T-ESOC) infrastructure and associated support services in the CESC to improve the monitoring and management of security related network activities across the Commonwealth
55	Enterprise Security Operation Center (ESOC) complete (Critical)	Establish the production Enterprise Security Operations Center (ESOC) infrastructure and associated support services in the SWESC to provide complete monitoring and management of security related network activities across the Commonwealth. The T-ESOC becomes the backup security operations center.
56	Enterprise vulnerability assessment program operational (Critical)	Establish the Enterprise Vulnerability Assessment Program (EVAP), with the infrastructure, staffing, and operational procedures necessary to perform assessments, report on deficiencies, ensure compliance with security policy, and provide for patch and configuration management
57	Computer Security Incident Response Center (CSIRC) Complete (Critical)	Establish the production CSIRC infrastructure and associated support services in the CESC as a command center for intrusion detection, virus identification and eradication, and response to security related incidents.
58	Service Commencement	Start of Service Delivery for all functional areas
59	Incident management system Web accessible (interim incident management system)	Remote helpdesk support
60	SWESC Staffed and trained	Staff hired, trained, and ready to provide customer support from the SWESC
61	Installation of Avaya telephony	Complete the installation of the Avaya switch and phone systems needed to support customer service desk activities
62	Dedicated incident management system and agent workstations installed	Complete the installation of the Peregrine ServiceCenter infrastructure and software (servers, systems software, Peregrine application, storage systems, and support tools) and agent workstations needed to support customer service desk activities
63	Transition services to Southwest Enterprise Solutions Center	Upon completion of the SWESC, transition customer service desk activities into the SWESC facility
64	Production incident management system/ SPOC help desk (Critical)	Complete implementation of the Peregrine ServiceCenter system to support customer service desk activities
65	Service Commencement	Start of Service Delivery for all functional areas
66	Commonwealth Enterprise Solutions Center (CESC) ready for occupancy	CESC construction completed and ready for occupancy
67	Commissioning Certificate for CESC	Certificate of Occupancy (CO) provided for the CESC facility

MS#	Milestone	Description
68	Richmond Plaza Building migration complete (Critical)	All VITA and NG staff relocated from RPB. All systems migrated from RPB. RPB available for lease termination.
69	Southwest Enterprise Solutions Center (Southwest ESC) ready for occupancy	SWESC construction completed and ready for occupancy
70	Commissioning Certificate for Southwest ESC	Certificate of Occupancy (CO) provided for the SWESC facility
71	Service Commencement	Start of Service Delivery for all functional areas
72	Process Cutover	Update Internal Application Documents and Procedures to CMMI Level 3 standards.
73	Migrate existing projects into maintenance umbrella	Implement "maintenance umbrella" procedures and train maintenance staff
74	Internal Apps Transformation Complete	Complete the Internal Applications transformation, provide operational procedures, and train applications support staff to support development and maintenance requirements

Figure 3.3.1-1. Completed and Accepted Milestones

3.3.2 Remaining Milestones

Six milestones remain to be completed as part of transition. The planned completion dates for these milestones are provided below.

Two critical milestones remain to be completed:

- #32, Enterprise agency-wide messaging system cutover complete (90%). This milestone represents the migration of 90% of the Commonwealth users to the Enterprise Email system. With completion of this milestone, nearly all Commonwealth personnel will use a secure email system to conduct Commonwealth business. The Enterprise email system, with active, onsite monitoring 24x7, is located at the Chester Data Center with a backup system implemented at the Southwest Virginia Data Center. The backup provides the ability to resume email operations within 4 hours in case of a prolonged outage of the primary system. When complete, the legacy systems in operation can be decommissioned, reducing operations and maintenance costs for Commonwealth agencies while providing improved, reliable service to end users. Planned completion: April, 2010.
- #45, Complete Agency LAN migration (90%). Achieve 90% checkpoint with implementation of approved plan to migrate "hot" ports from the legacy Commonwealth networks to the new MPLS network. Planned completion: January, 2010.

Four other milestones remain to be completed:

- #7, ITIL Process Optimization complete. All Information Technology Infrastructure Library (ITIL) workshops completed with representation from Agency IT staff, addressing the ten core ITIL processes. Remaining activities are limited to the Acceptance Test Plan completion. Agreement on the scope and duration of the acceptance test is a Capstone activity and is identified in Attachment A, Capstone. Planned completion: April, 2010.
- #17, Server consolidation complete (90%). Achieve 90% checkpoint with implementation of approved plan to consolidate 2,341 existing servers across the Commonwealth. Planned completion: October, 2009.
- #28, Completion of Desktop Refresh (90%). Achieve 90% checkpoint with implementation of approved plan to refresh 64,000 desktops across the Commonwealth. Planned completion: December, 2009.
- #44, Complete Agency LAN migration (68%). Achieve 68% checkpoint with implementation of approved plan to migrate "hot" ports from the legacy Commonwealth networks to the new MPLS network. Planned completion: November, 2009.

3.4 Transition Scheduling, Coordination, and Reporting

This plan requires the successful collaboration of Northrop Grumman, VITA, and the agencies, and the timely completion by each of all assigned tasks. In order to achieve the objectives of this transformation, all involved parties must commit to and embrace the management approaches for scheduling, agency coordination, and reporting as outlined below.

This plan provides realistic, achievable dates. With successful collaboration and cooperation from the agencies, Northrop Grumman is confident that the transition can be completed within the timeframe provided. Several factors support this confidence:

- Detailed understanding of the plan interrelationships.
- Experience gained in working to complete agency transformations to date.
- Enhanced understanding of agency legacy system complexities.
- A better understanding of agency business processes and constraints.

Throughout the current process to date, Northrop Grumman has gained a detailed understanding of the interdependencies of the agency transformations and the infrastructure projects needed to transform the Commonwealth's IT infrastructure

3.4.1 Scheduling Approach

It is Northrop Grumman's intent to complete the preponderance of transformation activities by March 31, 2010 in order to complete agency closeout activities by June 30, 2010. To support agency activities leading to the completion of transition by that date, Northrop Grumman has allocated 90 calendar days in the program schedule for agency-level project issues and to mitigate the risk associated with factors not yet identified by Northrop Grumman and VITA, exclusive of unforeseen agency changes in prioritization, additional work scope, or new services that might be required.

Given the complexities of the schedule compounded by the complexities of individual agencies and their specific site requirements, Northrop Grumman will use a rolling wave process to plan, in detail, agency transformation activities, infrastructure projects, Capstone projects, and milestone completion. Today, the schedule contains more than 90,000 discrete activities with more than 77,000 of them already complete. This plan presents Wave 1 of that process. Wave 1 presents:

- A high-level plan of the remaining agency transformations from today through completion of transition in June 2010.
- A detailed plan of activities for agency transformations over the next 90 days, through November 2009. This increases the likelihood of success since (a) there are several agencies nearing completion today and (b) Northrop Grumman has used lessons learned on these near-term agencies to develop detailed plans for future agencies,
- A detailed plan of the infrastructure projects and Capstone wave 1.
- A detailed plan to the completion milestones.

Future waves of the schedule will be made in three phases:

- Wave 2 will be delivered to VITA on October 5, 2009 and will detail program status and planned activities for the period ending January 1, 2010. Wave 2 will also include the remainder of Capstone transition activities not provided in Wave 1.
- Wave 3 will be delivered to VITA on November 2, 2009 and will detail program status and planned activities for the period ending February 1, 2010.
- Wave 4 will be delivered to VITA on December 7, 2009 and will detail program status and planned activities for the period ending June 30, 2010, to include transition closeout activities.

Northrop Grumman has developed a common set of tools and reports that will be used to successfully manage the schedule. Based on lessons learned to date from transformation activities, Northrop

Grumman will continue to provide VITA and the agencies with copies of the waterfall summary and detail schedule reports.

These reports, currently in use and regularly shared with VITA, will be modified to incorporate agency-level tasks in addition to Northrop Grumman activities. The agency tasks will be aligned with the service towers and will be linked with Northrop Grumman activities to show the respective responsibilities and dependencies necessary to meet agency project schedules. In addition, the agency tasks will roll up to an agency task work report associated with each project.

Northrop Grumman maintains and updates the schedule using Microsoft Project. VITA and the agencies are responsible for ensuring that the necessary resources are applied to enable the completion of their activities by their respective due dates.

To aid in making reported data clear and easy to understand, Northrop Grumman has added two stoplight icons on the schedule chart for each task: Agency Schedule Acceptance and Escalation – using the colors green, yellow, red, and gray to assist all parties in readily identifying areas that require additional scrutiny:

- The agency schedule acceptance stoplight will indicate the status of agency acceptance: “Green” will indicate that the schedule has been approved by the agency. “Yellow” shows that the schedule has been presented to the agency for review. If any issues prevent obtaining schedule approval – or if approval has not been received within two weeks of presentation to the agency – the indicator will show “Red.” “Gray” indicates that the particular section of the plan is complete.
- The escalation stoplight will show each agency’s ability to complete its portion of a project and identify issues that might need to be addressed in accordance with the escalation process. “Green” indicates that no issues exist that will prevent the agency from completing its portion of the project, while a “Yellow” will be used as a predictive tool to identify potential risks to the completion of schedule components. The indicator will be “Red” when issues rise to a point that the schedule will not be met. These “Red” issues will be clearly presented to the agency and to VITA to aid in resolution. Gray” indicates that the agency’s portion of a project has been completed.

3.4.2 Agency Coordination

Northrop Grumman commits to work directly with each agency to coordinate and finalize the transition schedule. This new approach to governance and agency coordination is one reason why we believe that the schedule can be executed as presented in this plan.

To demonstrate the completeness of our schedule, Attachments E, Agency Waterfall Summaries, and F, Agency Waterfall Details, contain the schedule of activities for each agency. In order to identify events that could potentially impact timely project completion is identified and addressed, Northrop Grumman will continue to utilize predictive failure analysis, which is described in detail in Section 3.4.4, below.

The assigned Northrop Grumman Agency Deployment Manager (ADM) for each agency will present the waterfall summary and detailed schedule reports to agencies for review and approval. This agency-level schedule will include tasks assigned to the agency with required completion dates. Each agency will accept its schedule and acknowledge its commitment by having its Agency Information Technology Representative (AITR) sign a revised schedule approval form. Any agency feedback (if required) should be given to the ADM at that time.

This approach assumes that AITRs are empowered to make commitments on behalf of the agencies. That assumption is critical to the success of the program. Proposed agency changes will be reviewed for program impact, and it will be the agency’s responsibility to manage its schedule. The approval of a schedule by an AITR will establish that agency’s baseline schedule. If scheduling or other planning issues cannot be resolved by the AITR and the ADM, the escalation process described in Section 4.4, will be invoked so as to rapidly resolve schedule issues.

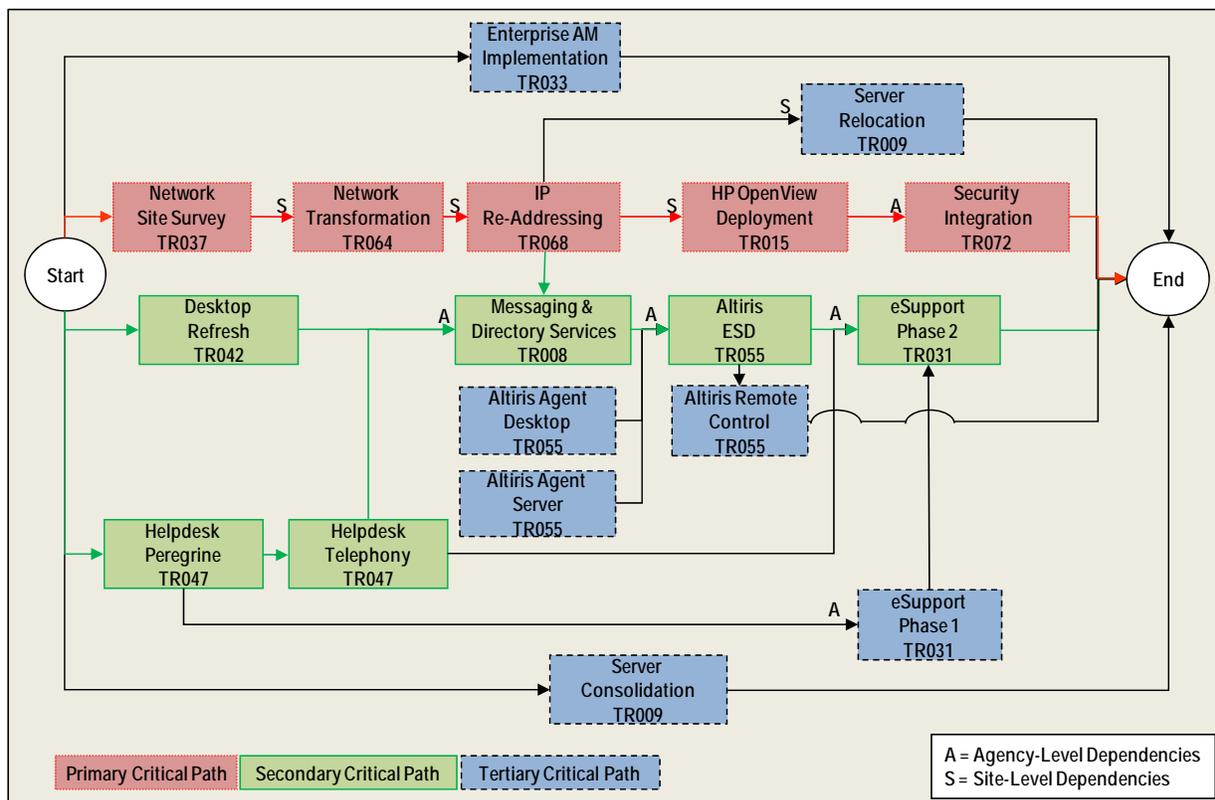
As demonstrated by the completed milestones listed in Section 3.3, AITRs and ADMs have already successfully coordinated a significant portion of the transition. More convincingly, Figure 3.4.2-1 illustrates

3.4.4 Predictive Failure Analysis

Northrop Grumman continuously strives to be more proactive and predictive in its project planning and forecasting. We utilize predictive failure analysis (PFA) to assist in identifying events that could potentially impact timely project completion. For example:

- Northrop Grumman determined that communications with the agencies could be improved to aid accuracy in the agency transformation plan. To improve communications, Northrop Grumman created the role of Agency Deployment Managers to interact directly with agencies and provide both parties with immediate schedule coordination.
- Northrop Grumman determined that agency-specific requirements were affecting the transition schedule. To address this, Northrop Grumman added agency activities to the integrated master schedule so that they would be part of the network of activities leading to agency transformation and eventual transition completion.

Predictive failure analysis is particularly useful in management of critical path activities. The critical path of agency transformation is illustrated in Figure 3.4.4-1. This critical path is the set of the most critical activities that must be performed during agency transformations, the sequencing of these activities, and the probable durations of these activities for an agency at specific agency sites. When these activities are threatened, the overall agency transformation can be impacted. By understanding the critical path and by predicting impacts to it, Northrop Grumman can more effectively manage the agency transformation timescales. Knowledge of this critical path allows Northrop Grumman to build an integrated schedule that is realistic.



VITA CAP 08-09-0010

Figure 3.4.4-1. Agency-Specific Dependencies

Project teams holistically evaluate critical path tasks by comparing them with project plans, critical customer requirements, resource allocations, and communications deadlines, as well as such historical data as trends, correlations, and root cause analyses. If the PFA indicates that a target date cannot be

met, Northrop Grumman, VITA, and the appropriate agency manager will negotiate an alternate target date for completion, and a corrective action plan will be generated.

3.4.5 Root Cause Analysis

In accordance with the CIA Section 3.13.1, upon notice from the Commonwealth of a failure to meet a Critical Milestone, Northrop Grumman is required to commence performing a Root Cause Analysis. For such a complex milestone as Transition Completion, a root cause analysis is an extensive, but necessary, undertaking. The results of the analysis will supplement VITA's, the agencies' and Northrop Grumman's understanding of the causes which may have contributed to technical, programmatic or organizational delays, impediments, or inefficiencies. While many of the factors are understood and have already been incorporated into this plan, others will only become apparent as the analysis progresses. Therefore, this plan will be updated as these causes are further understood, and as Northrop Grumman develops proposed avoidance mechanisms, alternative solutions, and other mitigations.

The Root Cause Analysis will aid in the parties' ability to be proactive and predictive regarding events likely to impact the Transition schedule, with a specific focus on those events likely to impact the critical path as discussed in section 3.4.4 above.

3.5 Unplanned Agencies

Since the CIA was signed, some agencies of the Commonwealth – for business reasons – cannot readily be transitioned at this time to a new infrastructure and managed services model.

Accordingly, agencies that cannot be scheduled for transformation at this time have not been planned in this plan. Northrop Grumman is committed to working with VITA to develop the transformation plans for these agencies by October 2, 2009. If at that time the agencies cannot be planned, Northrop Grumman will seek to appropriately adjudicate these agencies via the CIA contract mechanisms, including Section 27.5 Amendments, if required.

At the present time, for the reasons indicated below, the following agencies have not been planned and are not included in this plan:

- Virginia State Police (VSP). VSP is currently updating its Memorandum of Understanding (MOU) with the Federal Bureau of Investigation, which has indicated a willingness to accommodate the VITA infrastructure and associated technical aspects of the infrastructure and managed services. Northrop Grumman and VITA have been working with VSP on the MOU.
- Virginia Department of Emergency Management (VDEM). Like VSP, VDEM is updating its MOU with Department of Homeland Security.
- Department of Forensic Sciences (DFS). DFS has advised Northrop Grumman and VITA that it is not willing to undergo transition at this time.
- Department of Medical Assistance Services (DMAS). DMAS has advised Northrop Grumman and VITA that it cannot undergo transition to managed services until the expiration on July 1, 2010, of its IT outsourcing contract with FirstHealth.

3.6 Transition Completion

The Integrated Master Schedule (IMS) contains the integrated schedule of activities and events, including agency activities that lead to a complete transformation of the infrastructure, as defined in section 3.1 of this plan, and a complete infrastructure ready for managed services as defined in section 3.2. The IMS will be used as an aid to determining the actual projected end date, based on current status. Using our predictive failure analysis approach, the IMS will be used to indicate schedule conflict, to include schedule delays that impact major milestones. The joint team of Northrop Grumman, VITA, and agencies, represented by their AITRs, will then resolve conflicts and address items that are driving schedule dates.

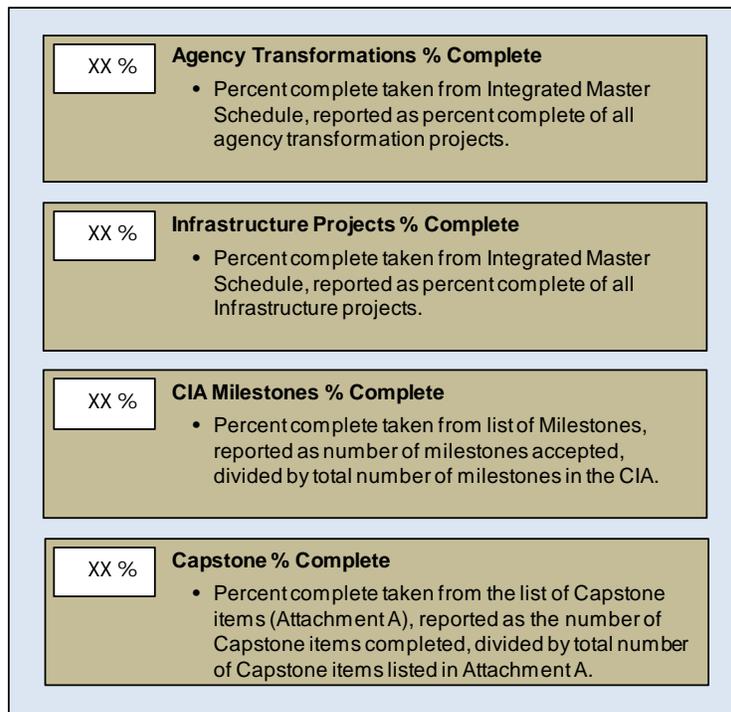
The sections below define processes that will be used in the course of the transition phase to maintain the baseline of work completed and remaining to be completed that will result in transition completion.

3.6.1 Completion Measurement

To assess overall percent complete of the transition phase, and to give VITA and the agencies insight into Northrop Grumman’s progress toward completion of transition. Northrop Grumman will report the transition completion status of the four key transition activities:

- Agency transformations. This measure represents the transformation status of the 85 agencies included in this plan. Percent complete will be taken from the IMS.
- Infrastructure projects. There are 59 infrastructure projects, such as resource unit billing, in the IMS. These projects are listed in section 3.1. These projects progressively build the IT solutions in the infrastructure to support system-wide managed services. Percent complete will be taken from the IMS.
- CIA Milestones. Milestones are the contractual completion events defined in the Comprehensive Infrastructure Agreement Attachment 10.1.2 (Transition Phase Fees and Corresponding Milestones and Expected Completion Dates) to Schedule 10.1 of the CIA and Schedule 6.6 (Critical Milestones). The list of CIA milestones and their current status is discussed in 3.3 of this plan. Percent complete will be taken as the number of milestones accepted divided by the total number of CIA Milestones.
- Capstone. Capstone is a gauge for assessing the readiness of Northrop Grumman to provide a managed service to the agencies. Percent complete will be taken as the number of Capstone items completed divided by the total number of Capstone items listed in Attachment A.

This approach is illustrated in Figure 3.6.1-1.



VITA CAP 08-09-0011

Figure 3.6.1-1. Completion Measure Process

The transition phase completion percentage will apply an equally-weighted metric to these four overarching activities to assess overall progress toward transition completion. The metric will use three metrics already in place and already shared by Northrop Grumman with VITA. The fourth, the metric for Capstone, is new.

3.6.2 Deferred Work Process

Deferred work is defined as work rescheduled, due to operational or business needs of an agency, by VITA and Northrop Grumman while awaiting conflict resolution or adjudication of other issues or constraints that prevent the accomplishment of work as detailed in the transition schedule.

Northrop Grumman understands that current agency work and operational schedules are an agency's top priority. For this reason, transformation of the Commonwealth's IT infrastructure may be subject to agency prioritization of current operational needs over transformation activities. This may mean that transformation activities receive a lower priority or that there is insufficient agency staff that can be dedicated to transformation activities. When such prioritization affects the transformation schedule of an agency, all parties may agree to defer work so as to maintain a reasonable transition schedule.

Work that is deferred will be subject to:

- Written agreement by VITA, the affected agency, and Northrop Grumman
- Removal from the completion criteria associated with transition or transformation for that Agency
- Re-planning the work, when practical, by Northrop Grumman, VITA, and the agency, to define when the work can be delivered, assuming the work can be prioritized by the agency when workloads permit and that schedule dependencies can be agreed by Northrop Grumman, VITA, and the agency

Deferred work is not intended to extend the completion date of transition. For this reason, no work will be deferred to complete beyond March 31, 2010. If work is anticipated to be delayed beyond this date, the work must be re-planned to start sooner or the work must be excluded from transition, as defined in section 3.6.3 of this plan. Requests for performance of deferred transition work by Northrop Grumman after March 31, 2010 may cause Northrop Grumman to incur additional costs and may be subject to resolution in accordance with provisions of the CIA, including section 6.5.

Northrop Grumman will be responsible for developing and maintaining the list of all deferred work and the written agreements associated with that work. Per the agreed schedule, Northrop Grumman will complete the transformation work and place the agency or work product under managed services.

3.6.3 Excluded Work Process

Excluded work is defined as work removed from the transition schedule as a result of adjudicated schedule or requirement conflicts based on agency operational or business needs. It differs from deferred work (see section 3.6.2) in that excluded work is indefinitely removed from the transition and transformation. Excluded work may encompass minor or substantial subsets of agencies.

Work that is excluded will be subject to:

- Written agreement between VITA, the affected agency, and Northrop Grumman
- Removal from completion criteria associated with transition or transformation for the agency

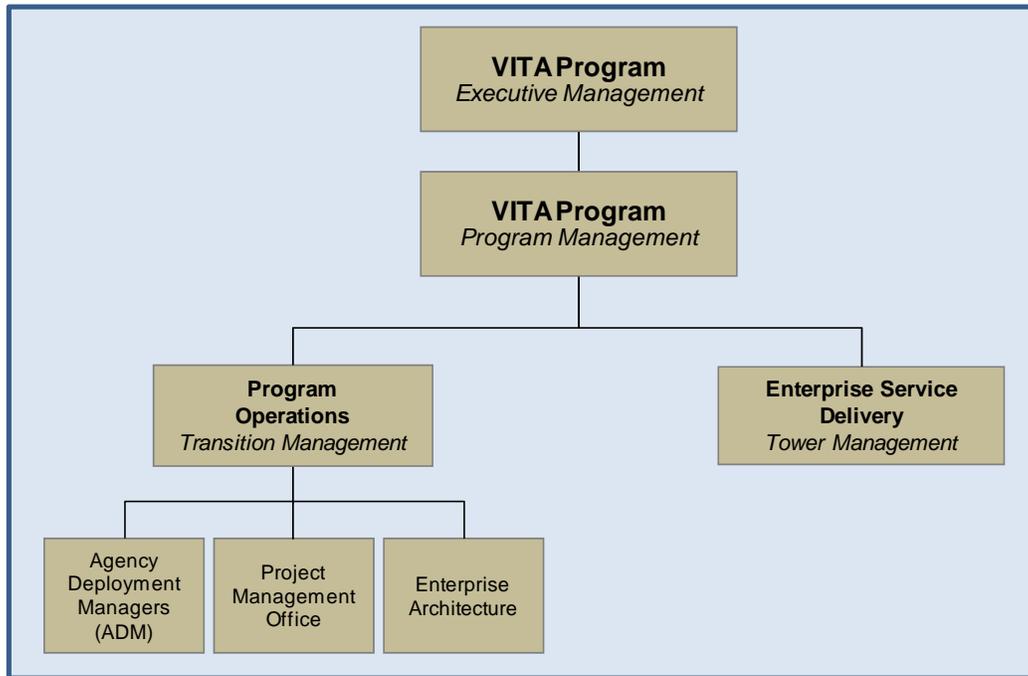
Because this work is excluded and not deferred, Northrop Grumman will not be required to re-plan the work. Northrop Grumman will be responsible for developing and maintaining the list of all excluded work and the written agreements associated with that work.

If required as a result of the above actions, an Amendment to the CIA, in accordance with CIA Section 27.5 (Amendments), will be initiated by Northrop Grumman and submitted to the to reflect the above exclusions.

4.0 PROGRAM ORGANIZATION AND GOVERNANCE STRUCTURE

4.1 Northrop Grumman VITA Program Organization

This section outlines the Northrop Grumman organization as it pertains to the scope of this plan. That organization is illustrated in Figure 4.1-1.



VITA CAP 08-09-0012

Figure 4.1-1. Northrop Grumman VITA Program Organization

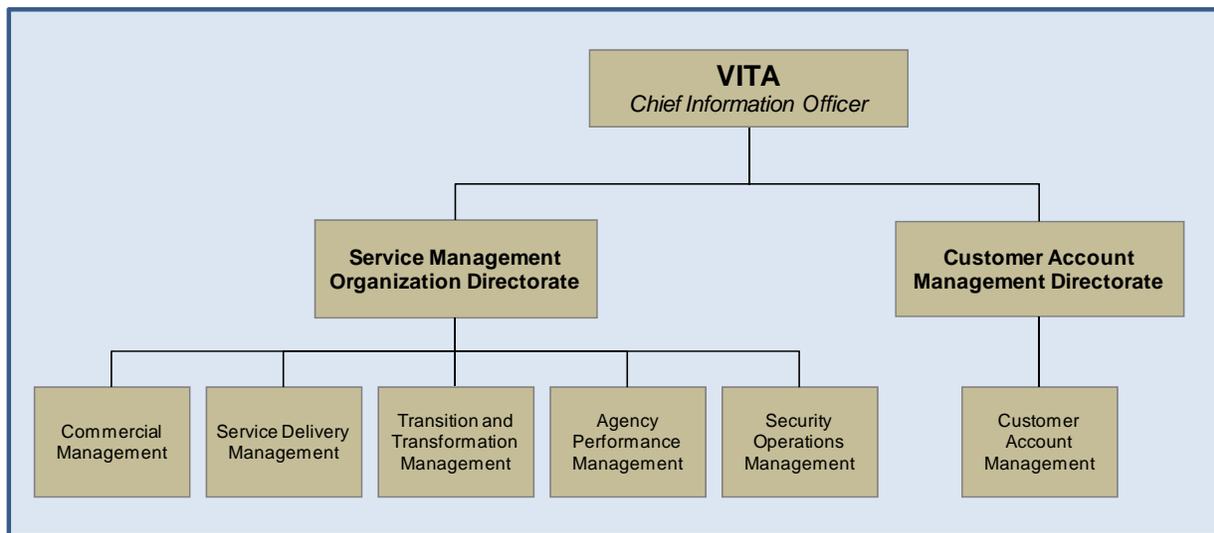
The management structure shown below has the following roles and responsibilities for Northrop Grumman's interaction with the Commonwealth and its agencies and the completion of assigned activities as outlined below:

- **Executive Management.** The Vice President of the Civil Systems Division of Northrop Grumman's Information Systems sector has the ultimate responsibility for meeting Northrop Grumman's contractual commitments. As such, he serves as the reporting senior for the program manager and also as the executive point of contact for all issues that involve leadership actions above the responsibility of program-level personnel.
- **Program Management.** The Vice President for the VITA Program serves as Northrop Grumman's program manager and as the customer relationship manager as defined in the CIA. This individual reports to the Vice President of the Civil Systems Division and is responsible for the successful execution of the transition, as well as delivery of all services to agency customers. Additionally, the program manager is responsible for service delivery.
- **Tower Management.** The Director of Enterprise Service Delivery reports to the program manager and is responsible for service delivery, to include the build-up of service offerings. The infrastructure projects discussed in this plan will, once complete, represent the service delivery capability offered to the agencies.
- **Transition Management.** The Director of Program Operations reports to the program manager and is responsible for the supervision and management of the activities outlined in this plan. He is responsible for integrating the activities of the service area functional teams and the agency-facing project managers to ensure delivery on all commitments in the plan.

- Project Management. Agency Deployment Managers (ADMs) are responsible for coordinating all transition activities for their assigned agencies. Reporting to the Director of Program Operations, they act as service integrators, maintaining constant communication with the service area transition teams, as well as agency management and VITA customer account managers and Agency IT leads.
- Program Management Office. The program management office is responsible for maintaining the integrated master schedule and for the regular and periodic reporting of status and dashboards that use this schedule.

4.2 VITA Organization

This section outlines the organization of the Virginia Information Technologies Agency as it applies to the ongoing transition needs of Commonwealth agencies and this plan. That organization is illustrated in Figure 4.2-1.



VITA CAP 08-09-0013

Figure 4.2-1. VITA Organization Supporting Transition

Within the overall VITA organization, two separate organizations are involved in transition: the Service Management Organization and Customer Account Management Directorates. Both of these are discussed below.

4.2.1 Service Management Organization

VITA's Service Management Organization (SMO) was created to implement and manage the IT Infrastructure Partnership responsible for modernizing the IT infrastructure at the executive branch agencies. The largest such public-private enterprise in the nation, the partnership was formed between VITA and Northrop Grumman in late 2005 and is valued at \$2 billion over ten years. It includes an initial Northrop Grumman \$270 million capital investment in the Commonwealth with additional investment throughout the program's life cycle as systems, equipment, hardware and software is refreshed and upgraded. The objectives of the IT Partnership include a modern and secure IT infrastructure "utility," economic and workforce development initiatives, and increased professional development and career growth opportunities for IT employees.

The five divisions of the SMO are closely aligned with other VITA directorates, as well as Northrop Grumman's program team:

- Agency Performance Management. Agency Performance Management (APM) performs business process improvements for SMO processes aligned across VITA, provides oversight for Requests

for Services (RFS), and agency relocations, and interfaces with VITA's Customer Account Manager (CAM) directorate.

- **Commercial Management.** Commercial Management oversees the financial and contractual aspects of the partnership and is responsible for managing the CIA between VITA and Northrop Grumman, including deliverables, disputes, audits, benchmarking, benefits realization, and contract modifications. The division also oversees partnership-related procurement, validation of Northrop Grumman's invoices, and management of the partnership budget.
- **Service Delivery Management.** Service Delivery Management serves as the day-to-day interface with Northrop Grumman for technical operations and service delivery. Organized by technology towers – desktop, help desk, messaging, server and mainframe, network, and cross-functional – the division monitors measurement of service levels to customers, coordinates planning and execution of technical transformation projects and service delivery initiatives, and ensures technical requirements of the contract are delivered.
- **Security Operations and Architecture.** Security Operations oversees all security-related aspects of the partnership, looking across all technical towers or domains to validate the technical approach of proposed partnership solutions from a security perspective. The division also provides security consulting services to customer agencies and reviews security across functional towers. The Architectural Liaison defines the day-to-day architectural aspects of the partnership and reviews proposed solutions for alignment with VITA's architecture and direction.
- **Transition and Transformation.** Transition and Transformation is VITA's Program Management Office for oversight and assurance of partnership activities and initiatives. It ensures integration and coordination of processes and implementation of best practices. It also conducts internal and external stakeholder management and performance reporting for the partnership and coordinates program milestone acceptance and testing.

The SMO organization includes dedicated staff resources to provide oversight for the non-technical, non-contractual "people" aspects of the program, including human resources, organizational change management, and communications.

4.2.2 Customer Account Management

VITA has combined the Customer Account Manager (CAM) and Agency Performance Managers (APM) functions into a single role to focus on the needs of its constituents, reduce customer contact points, and improve service. CAM assignments were made with the agencies' interests in mind as they are based on each account manager's previous agency experience and specific knowledge of agency business needs.

The Customer Account Management directorate establishes and maintains productive business relationships with the executive branch agencies, institutions of higher education, localities, and other governmental entities throughout the Commonwealth. Its focus is on understanding and meeting their respective business needs and helping them to align technology with business strategies. The directorate also services as a point of escalation for any customer service delivery issues.

4.3 Governance

Lessons learned by VITA, Northrop Grumman, and the agencies have led to changes that have enhanced the overall governance and communication between all parties. For instance, over the past several months, Northrop Grumman, VITA, and the agencies have defined and started to employ the roles of ADM, CAM, and AITR respectively. These three roles working together will help to ensure that schedules are met, questions answered promptly, and that conflicts are identified early and, where necessary, escalated to higher management for rapid closure. Communication between all parties is a critical element in achieving the schedule presented in this plan.

This section describes the proposed transition governance approach to be used by Northrop Grumman, VITA, and the agencies. Each party's responsibilities, areas of accountability, and escalation process are detailed to provide the framework for cooperation and collaboration that makes possible the completion of the transition in compliance with this plan. The intent of this section is to make clear Northrop Grumman's

understanding of its responsibilities and obligations with respect to the transition and to identify elements of reasonable cooperation in the transition process which Northrop Grumman expects to receive from the Commonwealth in accordance with in section 3.2.2 of the CIA.

4.3.1 Northrop Grumman – VITA Governance

This section describes the shared responsibilities assigned to Northrop Grumman and VITA for the management and completion of the transition. These responsibilities apply to all four transition components: Agency Transformation, Infrastructure Projects, Capstone, and Milestones. VITA and Northrop Grumman working together with the agencies to cooperatively plan and manage the transformation is the critical factor in achieving the transition milestones as scheduled. Figure 4.3.1-1, Northrop Grumman – VITA Governance Roles and Responsibilities, provides an operational view of the transition leadership roles and accountability across those roles.

Transition Responsibilities				
Role	Leadership Responsibilities	Accountability	Northrop Grumman	VITA
Executive Leadership	<ul style="list-style-type: none"> Define transition strategy 	<ul style="list-style-type: none"> Resolve escalated issues 	✓	✓
	<ul style="list-style-type: none"> Executive sponsors of this plan 	<ul style="list-style-type: none"> Overall accountability for the Transition 	✓	✓
	<ul style="list-style-type: none"> Communicate with Governor's Office, Agency Executives, Corporate Executives 		✓	✓
	<ul style="list-style-type: none"> Communicate strategy and goals to the Northrop Grumman – VITA transition team 		✓	✓
Contracts Management	<ul style="list-style-type: none"> Provide guidance on contractual requirements of the CIA, particularly with respect to transition 	<ul style="list-style-type: none"> Document contractual agreements / amendments 	✓	✓
	<ul style="list-style-type: none"> Closely coordinate with counterpart to ensure contract actions are addressed in a timely manner, including those specifically set forth in this plan 	<ul style="list-style-type: none"> Ensure parties execute transition with the boundaries of this plan and the CIA 	✓	✓
	<ul style="list-style-type: none"> Provide focal point for all communications between parties concerning contractual requirements for transition and related agreements, including communications regarding significant scheduling delay issues 		✓	✓
Program Management	<ul style="list-style-type: none"> Provide resources for transition 	<ul style="list-style-type: none"> Advise Executive Leadership on issues and progress 	✓	✓
	<ul style="list-style-type: none"> Approve tactical transition plans 	<ul style="list-style-type: none"> Resolve escalated issues 	✓	✓
		<ul style="list-style-type: none"> Responsible for on time execution and completion of agency transformation 	✓	✓
Transition Management	<ul style="list-style-type: none"> Develop and manage the transition schedule 	<ul style="list-style-type: none"> Responsible for on time execution and completion of transition activities 	✓	✓
	<ul style="list-style-type: none"> Identify potential problems and take preemptive action to prevent 	<ul style="list-style-type: none"> Resolve escalated issues 	✓	✓
	<ul style="list-style-type: none"> Coordinate activities with agencies 		✓	✓
	<ul style="list-style-type: none"> Advise Program Management 		✓	✓

Transition Responsibilities				
Role	Leadership Responsibilities	Accountability	Northrop Grumman	VITA
Tower Management	<ul style="list-style-type: none"> Manage resources to meet schedule commitments 	<ul style="list-style-type: none"> Responsible for on time execution and completion of functional area transition activities 	✓	
	<ul style="list-style-type: none"> Identify potential problems and take preemptive action to prevent 	<ul style="list-style-type: none"> Resolve escalated issues 	✓	
	<ul style="list-style-type: none"> Advise Transition Management 		✓	
Tower Project Management	<ul style="list-style-type: none"> Manage transition projects to schedule and budget 	<ul style="list-style-type: none"> Responsible for on time execution and completion of functional project transition activities 	✓	
	<ul style="list-style-type: none"> Identify potential problems and take preemptive action to prevent 	<ul style="list-style-type: none"> Resolve problems 	✓	
	<ul style="list-style-type: none"> Escalate issues to Functional Area and Transition Management 	<ul style="list-style-type: none"> Escalate issues that cannot be resolved 	✓	
	<ul style="list-style-type: none"> Coordinate activities with Agency Points of Contact 		✓	

Figure 4.3.1-1. Northrop Grumman – VITA Governance Roles and Responsibilities

The individuals identified in this governance structure must be empowered to make decisions and to resolve schedule issues, recognizing, however, that any changes to the terms of the CIA, including Attachments / Schedules thereto, must first be ratified by the Parties' respective Contracts Management organizations.

Other governance-related improvements implemented in conjunction with this plan are a VITA/Northrop Grumman joint weekly transition status meeting and integration of transition activities with the program change management process. A program wide Transformation Meeting was implemented this past spring to bring all transformation performing organizations together to directly address the schedule and issues impeding progress. At this session, action plans are reviewed and improved, resources assigned and delays in progress examined. VITA participation in these sessions would assist in improved schedule progress for the transition. We look forward to working with the VITA SMO to integrate VITA transition support personnel into these weekly reviews.

A key lesson learned from the transition activities to date is the need to keep the transition schedule and scope aligned. Changes must be closely coordinated with the parties' Contracts Management organizations. Controlling change as the transition progresses is essential in maintaining schedule performance and project completion

4.3.2 Northrop Grumman – Commonwealth Agency Governance

This section describes the interaction between Northrop Grumman and agencies in completing the transition. The governance model is informed by lessons learned and best practices. The role of Agency Information Technology Manager (AITR), the individual representing the interests of the agency, is integrated into the governance model. The model is presented based on the transition activities and the roles and responsibilities defined around transformation activities. Figure 4.3.2-1, Northrop Grumman – Commonwealth Agency Governance Roles and Responsibilities, provides an overview of these transition leadership roles and their responsibilities across five key areas of interface between Northrop Grumman and the Commonwealth agencies: Transition Schedule Sign-off; Transition Issue Resolution; Project Completion and Acceptance; Schedule Delays; and Status Meetings. Northrop Grumman-Commonwealth Agency governance is particularly pertinent to the completion of two of the Transition components: Agency Transformations and a majority of the Infrastructure Projects. Effective, timely, and clear communication, coordination, and issue resolution among the responsible parties is vital to the

successful transformation of agencies and completion of infrastructure projects which involve agency deployment elements.

Role / Activity					
Northrop Grumman Agency Deployment Manager	Agency Information Technology Representative	Customer Account Manager	Northrop Grumman Agency Operations Manager	Agency Point of Contact	Northrop Grumman Tower Project Manager
Agency Transformation Schedule Signoff					
<ul style="list-style-type: none"> Present schedule to AITR Coordinate resolution of issues Provide updated schedule for signoff Escalate issues that cannot be resolved 	<ul style="list-style-type: none"> Review schedule and tasks assigned to agency Coordinate schedule internally Work with ADM to resolve issues Sign schedule 	<ul style="list-style-type: none"> Facilitates communication of schedule to AITR 	<ul style="list-style-type: none"> Facilitates communication of schedule to AITR Augments ADM 	<ul style="list-style-type: none"> NA 	<ul style="list-style-type: none"> NA
Agency Transformation Issue Resolution					
<ul style="list-style-type: none"> Identify and track transition related issues Coordinate issue resolution with AITR and Agency Point of Contact (POC) Engage Tower PM as needed Escalate issues that cannot be resolved 	<ul style="list-style-type: none"> Identify transition related issues Coordinate agency actions to resolve transition issues 	<ul style="list-style-type: none"> Assists in coordination and resolution of issues 	<ul style="list-style-type: none"> Assists in coordination and resolution of issues Augments ADM 	<ul style="list-style-type: none"> As needed, coordinate agency issues for area of responsibility 	<ul style="list-style-type: none"> Support ADM and Agency POC in resolution of transition issues
Infrastructure Project Completion and Acceptance – Agency-specific					
<ul style="list-style-type: none"> Provide acceptance documents to AITR for signoff Assist in resolution of issues impacting signoff Escalate sign off issues that cannot be resolved 	<ul style="list-style-type: none"> Coordinate signoff Identify issues preventing signoff 	<ul style="list-style-type: none"> Assists in coordination and resolution of issues 	<ul style="list-style-type: none"> Assists in coordination and resolution of issues Augments ADM 	<ul style="list-style-type: none"> Provide support to AITR in obtaining signoff 	<ul style="list-style-type: none"> Provide support to ADM in obtaining signoff
Agency Transformation Schedule Delays					
<ul style="list-style-type: none"> Identify potential schedule delays with AITR, Agency POCs, and Tower PMs Mitigate schedule delays through coordination with Agency POCs and Tower PMs Escalate schedule delays that cannot be mitigated 	<ul style="list-style-type: none"> Identify potential schedule delays Work with Agency POCs, ADM, and Tower PMs to resolve schedule delays Alert Agency executives of potential schedule delays 	<ul style="list-style-type: none"> Assists in identifying solutions and workarounds 	<ul style="list-style-type: none"> Assists in identifying solutions and workarounds 	<ul style="list-style-type: none"> Identify potential schedule delays Work with other Agency POCs, ADM, and Tower PMs to resolve schedule delays 	<ul style="list-style-type: none"> Identify potential schedule delays Work with Agency POCs, ADM, and other Functional PMs to resolve schedule delays

Role / Activity					
Northrop Grumman Agency Deployment Manager	Agency Information Technology Representative	Customer Account Manager	Northrop Grumman Agency Operations Manager	Agency Point of Contact	Northrop Grumman Tower Project Manager
Agency Transformation Status Meetings					
<ul style="list-style-type: none"> • Work with AITR to determine meeting type and frequency • Provide up to date status on all agency transition projects • Capture and report on action items • Identify and report on potential problems 	<ul style="list-style-type: none"> • Work with ADM to determine meeting type and frequency • Provide status on all agency transition tasks • Report on assigned action items • Identify potential issues impacting transition 	<ul style="list-style-type: none"> • Report on assigned action items • Identify potential issues impacting transition 	<ul style="list-style-type: none"> • Report on assigned action items • Identify potential issues impacting transition 	<ul style="list-style-type: none"> • Provide status on agency tasks specific to POC's Tower responsibility. • Report on assigned action items • Identify potential issues impacting transition 	<ul style="list-style-type: none"> • Provide status on Tower projects • Report on assigned action items • Identify potential issues

Figure 4.3.2-1. Northrop Grumman – Agency Governance Roles and Responsibilities

In addition, to the governance roles and activities described in Figure 4.3.2-1, Northrop Grumman has identified VITA and agency critical cooperation responsibilities that are essential to the success of transition projects. The VITA Program Office is responsible for gaining and ensuring cooperation by all Commonwealth entities in support of this plan. VITA's Customer Account Manager (CAM), working with the Agency Information Technology Resources (AITRs), the individual empowered on behalf of the agency to ensure agency involvement in transformation planning, provide coordination between Northrop Grumman and the Agency. In this regard, VITA will ensure that information regarding completion dates, resource loading and sequencing of agency tasks, as provided to them by the AITR, is accurate and provide currently planned or otherwise known agency software, hardware or business events or dependencies not included in the initial transition schedule no less than 45 days before the rolling wave schedule is due to be delivered by Northrop Grumman. This will allow Northrop Grumman to resolve events that may impact the transition schedule or to escalate items for deferral or exclusion as appropriate to this plan schedule. These dependencies are captured within the individual Agency's transformation schedule.

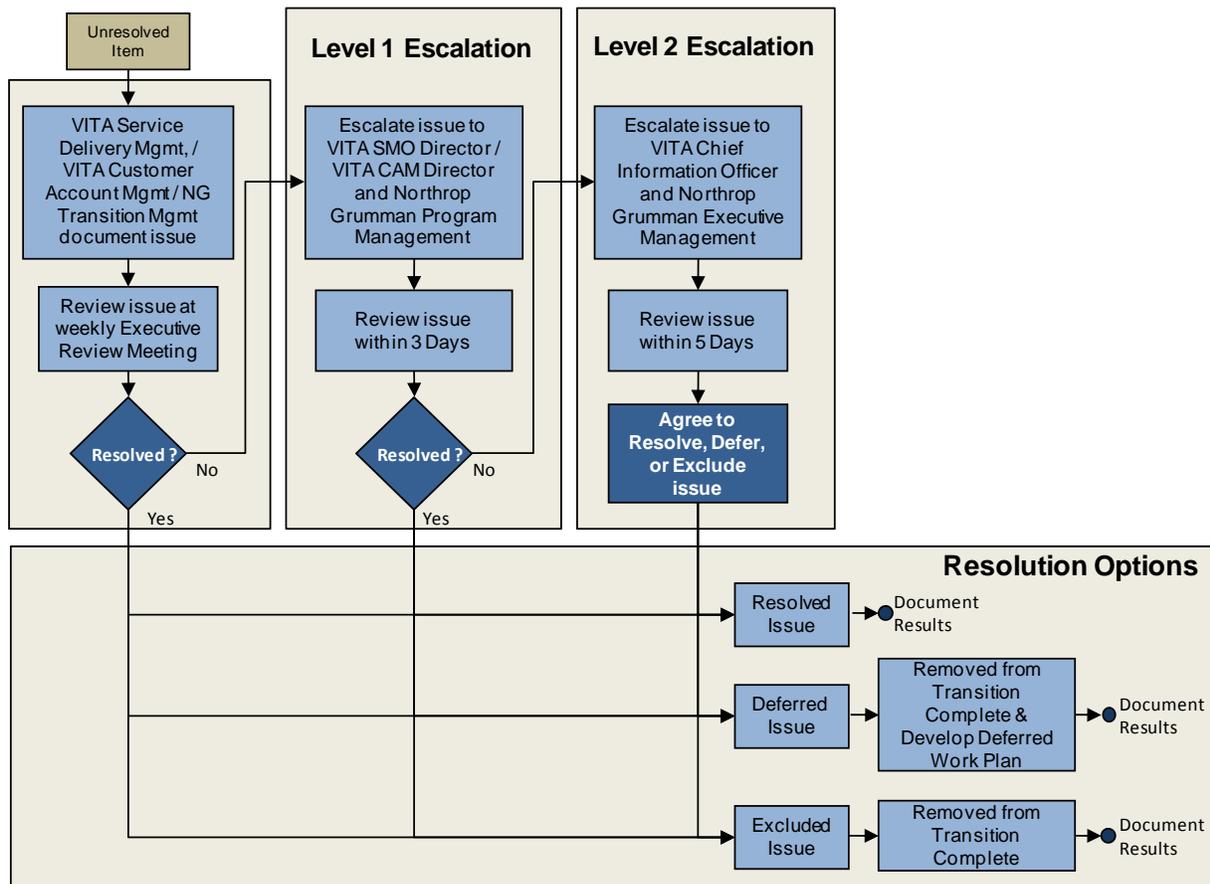
Executive agencies are responsible for:

- Assignment of an agency point of contact (APOC) for coordination of transition activities with the agency
- Providing timely feedback to Northrop Grumman and VITA on the transformation planning dates.
- The completion, resource loading, and sequencing of agency tasks, using the information provided by Northrop Grumman and the assigned ADM.
- Accepting in writing the planned transformation schedule and the agency commitments captured in the schedule
- Escalating to VITA and Northrop Grumman as appropriate, schedule conflicts that may cause delays to transformation plans.
- Supporting and participating in kickoff and coordination meetings for all transformation activities
- Completing, in a timely manner, data requests from VITA and Northrop Grumman that support each transformation activity as identified in the detailed agency transformation plan
- Testing, approving, and accepting activities as identified in the detailed agency transformation plan

- Timely requests for security policy exemptions if required
- Allowing access to facilities and office spaces as necessary to complete transformation activities
- Communicating to agency staff to prepare for site visits by Northrop Grumman personnel
- Reviewing and approving agency-unique transformation requirements (i.e. standard desktop image configuration and acceptance)
- Communicating with and monitoring the actions of agency employee who have been assigned necessary tasks to facilitate service transition (e.g., reducing mailbox size to 50MB prior to migration, transportation of laptops to a central agency location for updates).

4.4 Escalation Process

The successful transformation of Virginia’s IT infrastructure requires that all involved parties cooperate to agree upon and embrace a consistent process for the escalation of any unresolved transition issues. This section outlines that process and defines the standard cycle times for escalation decisions that must be embraced by Northrop Grumman and VITA to ensure the success of this plan. The approach taken is to resolve all escalation issues within ten calendar days. This process is illustrated in Figure 4.4-1.



VITA CAP 08-09-0014

Figure 4.4-1. Escalation Process

Northrop Grumman’s Transformation Manager will enter each unresolved issue into the escalation log and present it during the weekly Executive Review Meeting. The Transformation Manager will also complete a Transformation Issues briefing sheet that identifies the areas of disagreement regarding the

unresolved issue from all perspectives. All involved parties are expected to provide input for the purpose of reaching a resolution and updating the escalation log.

If the parties, at the team level, are unable to resolve an issue within the defined cycle time, then the resulting issue will be escalated to the next management level in the process. The decision may also be made at this time to defer or exclude a project from transition completion, in which case it will be moved to the Incomplete/Deferred work category.

If the issue is deferred, it is removed from the plan and assigned its own schedule and date for completion that must be approved by all parties. If the issue is excluded – which can only be authorized by a Level 1 or higher manager from both VITA and Northrop Grumman – it is removed from the plan and no further action is taken. Whether an item is deferred or excluded, its associated work and completion criteria are removed from further measurement within the scope of work of transition completion.

When a resolution has been reached by the parties on an escalated issue, VITA will be responsible for communicating that back to the affected agency and ensuring compliance with any decision.

5.0 ASSUMPTIONS, CONSTRAINTS, AND DEPENDENCIES

Northrop Grumman is unwavering in its commitment to successfully transition agencies of the Commonwealth of Virginia to a modern, robust, managed services IT environment. This plan provides a high-level, yet comprehensive, approach as to how Northrop Grumman – cooperatively and in close coordination with the Commonwealth and its agencies, in particular VITA – will complete the transition activities in accordance with the timeframes outlined in this plan.

Section 3.2.2 of the CIA provides that Northrop Grumman, with the reasonable cooperation of the Commonwealth, will accomplish a seamless and orderly transition from prior services the Commonwealth was receiving to the services contracted for under the CIA. Central to the success of this endeavor is an understanding of Northrop Grumman's expectations and requirements with respect to the reasonable cooperation it will receive from the Commonwealth in executing its transition responsibilities. These elements of anticipated cooperation are reflected in the preceding sections of this plan describing the governance of the transition process, its timetable and the responsibilities of Northrop Grumman, VITA and the Commonwealth's agencies in accomplishing the transition. In addition, this section sets forth certain key foundational elements of anticipated cooperation in the form of *Assumptions, Constraints, and Dependencies* upon which this plan is prepared and proposed.

5.1 Assumptions

1. This plan updates and amends the Detailed Transition Plan dated June 16, 2006, and Appendix 1 to Schedule 3.2 of the Comprehensive Infrastructure Agreement.
2. As updates to this plan are provided, additional assumptions may be identified.
3. Northrop Grumman will exert all reasonable scheduling flexibility in order to accommodate the needs of the agencies. However, Northrop Grumman will identify to the Commonwealth any Commonwealth-directed changes to any of the various project schedules and plans that would negatively affect Northrop Grumman's ability to execute the tasks in this plan in a timely and successful manner and expects that the Commonwealth will reasonably cooperate with Northrop Grumman in resolving such impacts in the manner described below..
4. Acceptance of the transition schedule by an agency will establish the baseline for that agency. Any changes requested thereafter that negatively affect the overall transition schedule will be outside the scope of the completion date for this transition if such requested change cannot be accommodated without impacting the agency and overall transition end dates.
5. The Virginia School for the Deaf and the Blind in Hampton is closing, and will not therefore be tracked or measured.
6. The Virginia State Police, Virginia Department of Emergency Management, Department of Forensic Sciences and the Department of Medical Assistance Services are not included in the transition schedule, and its associated activities, and will not be measured or taken into account in assessing the achievement of transition completion. Pending discussions with the Commonwealth, these agency transition requirements may be scheduled for a future time, taking into account agency-unique requirements and terms of the CIA.
7. Reporting processes will utilize existing agency and project reporting frameworks and cycles from the Northrop Grumman IMS, including waterfall summaries and details to VITA and agencies, as well as project summary reports to VITA. No new reporting processes or procedures will be required.
8. Given that Northrop Grumman and the Commonwealth have collaborated on the Capstone completion criteria, such criteria will supersede any project-level completion criteria, and existing project-level completion detail will be removed from IMS. Capstone items will be tracked and managed in the IMS. Capstone items not included in this plan as part of Attachment A will not be considered part of transition and will be tracked in a separate plan.
9. Acceptance Criteria and Acceptance Test Procedures will only be used for Schedule 10.1.2 milestones set forth in the CIA.

-
10. New Services (e.g. services not presently identified by Northrop Grumman for Transition) are excluded from this plan.

5.2 Constraints

1. Agencies subject to transition will be expected to maintain budgets sufficient to allow for the full, timely, and compliant execution of agency responsibilities necessary to meet the transition schedule.
2. Any internal Commonwealth applications or processes that may impact the transition schedule must be discussed with Northrop Grumman as they are identified. Northrop Grumman will endeavor to accommodate any related agency schedule priorities, provided that there is no impact to the overall transition completion date.
3. The ability to complete this transition as set forth herein is based on the mutual understanding of the services in existence as of the date of this plan. Should additional services be deemed necessary, including those for an agency to transform, Northrop Grumman will advise the Commonwealth of its potential impact on the transition completion date and associated additional cost.
4. This plan assumes that Northrop Grumman utilizes its standard methodology for implementing and managing server administration rights.
5. VOIP services were made optional in CIA Amendment #47 and are not therefore included in transition planning.

5.3 Dependencies

1. Northrop Grumman's ability to complete the transition in accordance with the schedule identified in this plan is dependent on the reasonable cooperation of the Commonwealth, including full compliance with the processes outlined in this plan by the Commonwealth and the agencies subject to transition.
2. Timely execution of this plan is highly dependent on the cooperation and collaboration of the agencies regarding transition and transformation dependencies, and on Northrop Grumman being given the necessary timely access to both agency personnel and to the various Agency sites.
3. Because the scope of the following Engineering Change Proposals (ECPs) will impact how and when transition will occur, their inclusion in the transition is contingent on VITA's timely approval of each ECP, preferably within 45 days of submission to VITA:
 - a. Wireless: Security standards at specific agencies will have to be addressed in transition.
 - b. DSS Shared Support: This support affects the scope at various sites.
 - c. Virtual Private Network: A VPN is required to address dual-factor authentication issues.

6.0 ATTACHMENTS

Attachment A – Capstone

This attachment identifies the Capstone items selected for inclusion in the IMS and this plan for use in assessing the progress of transition. Both wave 1 and wave 2 items are listed in this attachment.

Attachment B – Capstone Wave 1 Schedule

This attachment presents the Capstone wave 1 schedule.

Attachment C – Transformation Project Plans

This plan includes 59 projects that will be implemented to transform the Commonwealth's IT infrastructure and support services into an enterprise Managed Service. The current open transformation project plans are provided here, and as separate Adobe pdf files.

Attachment D – Agency Dashboard Reports

Northrop Grumman's plan includes 85 Agency plans that are extracted and integrated from the 13 open agency facing projects, and comprise the services elements that require agency interaction to complete. The reports are split into two sections:

- Attachment D-1: 20 large agencies which comprise 90% of the commonwealth assets, and all agencies,
- Attachment D-2: All Agencies.

These dashboards show agency task status for each or the projects and scheduled transformation completion. Additionally, the vertical summaries allow users to see progress through the agency elements within the tower projects.

Attachment E – Agency Waterfall Summaries

A separate agency waterfall (Gantt) summary view is provided here for each of the 85 agencies and as separate pdf files.

Attachment F – Agency Waterfall Details

Northrop Grumman's plan includes 85 Agency plans that are extracted and integrated from the 13 open agency facing projects, and comprise the service elements that require agency interaction to complete. A separate agency waterfall detailed views listing all tasks and sites is provided here for each of the 85 agencies and as separate pdf files.