

COMMONWEALTH of VIRGINIA

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MEMORANDUM

TO: Members of the Joint Legislative Audit and Review Commission
FROM: Mark Gribbin; Principal Analyst for Ongoing Oversight and Fiscal Analysis
SUBJECT: IT services disentanglement and transition

The Virginia Information Technologies Agency (VITA) provides central IT services to state agencies through a contract with Northrop Grumman. VITA must move the state to new service contracts when the term of the Northrop Grumman contract expires in 2019. This effort includes three interwoven activities: IT sourcing, disentanglement, and transition (Figure 1).

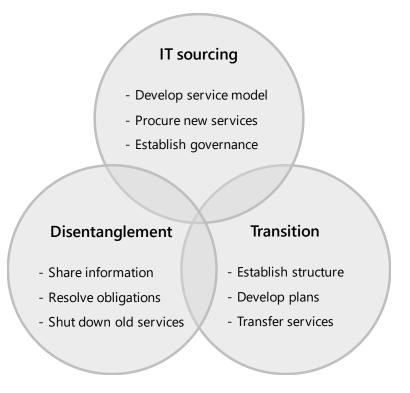
The IT sourcing initiative is the state's strategy for moving forward from the Northrop Grumman contract to a new central IT services model. Under the new model, the state will hold contracts with multiple providers for individual IT services, such as internet and data center services. The state will procure and transition to new service contracts in "waves" between now and July 2019. The first wave is already underway, with the procurement of new messaging and mainframe services. Services will be provided under a new governance structure that has increased levels of agency involvement.

To facilitate transition to the new model, the state must "disentangle" from its current service contract with Northrop Grumman. Under disentanglement, VITA and Northrop Grumman must share information on current services, resolve key contractual and financial obligations, and shut down services after transitioning to new providers. The transition process itself must be managed under a well-defined structure and guided by detailed plans.

VITA and Northrop Grumman have made progress toward disentanglement and transition. The parties have appointed organizational leads, held regular meetings, made and fulfilled numerous

FIGURE 1

IT sourcing, disentanglement, and service transition are complementary activities



SOURCE: Comprehensive Infrastructure Agreement between VITA and Northrop Grumman, VITA documents, and consultant IT sourcing report and supporting documents.

data and document requests, and established a program management office. The first wave of transition projects for IBM mainframe and messaging services is underway, and VITA and Northrop Grumman have engaged in detailed discussions about how to proceed. VITA and Northrop Grumman have also started discussing the second wave of transition.

Despite progress, VITA and Northrop Grumman need to resolve significant disagreements. Northrop Grumman has declined to provide information needed to support the transition of IBM mainframe services. Northrop Grumman also declined to provide server infrastructure to support the transition of messaging services. In August 2016, VITA declared Northrop Grumman in breach of contract over these disagreements. The disagreements have hindered service transitions, and similar disagreements could negatively impact the much larger and more complicated transitions that are planned in the years to come.

VITA and Northrop Grumman have not agreed on how to manage services during the transition period or discussed the state's financial obligations after transitions are complete. Although VITA and Northrop Grumman are not yet in a formal dispute over these issues, firm agreement is needed to avoid service disruptions and unexpected costs.

VITA needs to accomplish the following tasks to help ensure that the state's central IT services are transitioned in a smooth and timely manner. In resolving disagreements, VITA should work

in consultation with the Office of the Attorney General to pursue all avenues necessary while protecting the rights of the state.

- Resolve disagreement on what information must be shared by Northrop Grumman to facilitate transition;
- Resolve disagreement on Northrop Grumman's responsibilities for supporting new services;
- Resolve disagreement on Northrop Grumman's service management responsibilities during the transition period;
- Resolve terms and conditions related to service terminations and the state's financial obligations afterward; and
- Develop detailed transition plans that provide clear direction to all parties.

Northrop Grumman will need to continue providing central IT services to state agencies while supporting disentanglement and transition. Northrop Grumman has met most of its contractual service performance levels thus far, but metrics for some services indicated that performance declined in the past year. The end of the contract also carries the risk of unexpected cost increases. While the cost of most Northrop Grumman services continue to increase as expected, VITA is disputing unexpected cost increases related to Unisys mainframe and Microsoft licensing services. In August 2016, VITA declared Northrop Grumman in breach of contract for improperly billing the state for these services.

VITA needs to accomplish the following tasks to help ensure the state's central IT services are delivered in a consistent and cost effective manner. In resolving disagreements, VITA should work in consultation with the Office of the Attorney General to pursue all avenues necessary while protecting the rights of the state.

- Ensure Northrop Grumman identifies and addresses the underlying causes of declining performance of some services, and
- Resolve disagreements with Northrop Grumman on the proper charges for Unisys mainframe and Microsoft licensing services.

Transition hindered by disagreement on Northrop Grumman's information sharing responsibilities

VITA and Northrop Grumman disagree over what information the company must provide to support transition. The disagreement has hindered transition of IBM mainframe services, and may prevent VITA from obtaining the best possible prices under its new contract for these services. VITA has declared that Northrop Grumman is in breach of contract for not providing the requested information, based on legal advice provided by the Office of the Attorney General.

Northrop Grumman has subcontracts with third parties, such as licensing agreements with software companies, that are essential to mainframe operations. VITA asked Northrop Grumman to provide copies of these subcontracts to support the state's effort to procure new

mainframe services. Northrop Grumman provided some of the requested information but has not shared some key documents and fee information. Some information has been withheld because, according to Northrop Grumman, the company's business partners consider the information proprietary. VITA indicated that Northrop Grumman is contractually obligated to provide this information, based on legal advice provided by the Office of the Attorney General.

The disagreement on information sharing hindered the transition of IBM mainframe services by delaying selection of the new provider. VITA had expected to share the subcontract information with prospective new service providers, who could use it to develop their proposals. Northrop Grumman was slow to provide information and did not share some details. As a result, the contract award has been delayed. VITA originally planned to make the award by August 12, but the award has not yet been made.

VITA indicated that the lack of information on Northrop Grumman's subcontracts may prevent the state from obtaining favorable pricing for new IBM mainframe services. Prospective service providers could have used this information when deciding which subcontracts to adopt when they took control of the IBM mainframes. Because the information was incomplete, providers assumed they would need to negotiate new subcontracts and installation fees. According to VITA, this will result in higher costs to the new service provider that are likely to be reflected in higher prices charged to the state.

Northrop Grumman indicated that the company intends to withhold proprietary information related to other services, which could affect future service transitions. VITA indicated that incomplete information could have an even greater negative effect on the transition and cost of higher-cost services, such as server and data storage services. VITA, in consultation with the Office of the Attorney General, should pursue all avenues necessary to resolve the disagreement over what information Northrop Grumman must provide to facilitate transition, while protecting the rights of the state.

Transition hindered by disagreement on Northrop Grumman's infrastructure support responsibilities for new services

VITA and Northrop Grumman disagree over the company's duty to support new services. The disagreement has hindered transition of the new messaging services. VITA has declared the company to be in breach of contract for its refusal to provide support, based on legal advice provided by the Office of the Attorney General.

Northrop Grumman has declined to provide the server infrastructure that would support the state's new messaging services, on the grounds that it is not required to support the state's new service providers. Without these servers, the state cannot begin transitioning to its new messaging service. Northrop Grumman's refusal to provide the requested servers has delayed messaging transition for an indefinite period.

The current transition delay could have been avoided if Northrop Grumman had raised its objections earlier. Northrop Grumman was made aware that VITA might need servers for its new messaging service several weeks before a formal request was made. Northrop Grumman

did not raise concerns at the time, and did not indicate the request would be declined until after it was made.

Future transitions of more complicated services could be negatively impacted if Northrop Grumman declines to support them as well. For example, the state plans to continue using Northrop Grumman-managed data networks after most other services have been transitioned. If Northrop Grumman declines to provide network support to new services, transition efforts could be severely affected. VITA, in consultation with the Office of the Attorney General, should pursue all avenues necessary to resolve the disagreement over Northrop Grumman's obligations for supporting the state's new central IT services, while protecting the rights of the state.

Responsibility for service management during the transition period is in dispute

Responsibilities for managing IT services need to be clearly defined as the state transitions to its new IT services model. Currently, services are provided under a single contract with Northrop Grumman. In the future, services will be provided under a set of integrated contracts, managed under an MSI.¹ During the interim transition, some services will be provided by Northrop Grumman and others by the new service providers. The responsibilities of each party need to be defined so that new services can be implemented without disrupting existing services.

VITA and Northrop Grumman have not agreed on how the transitional services environment will be managed. VITA indicated that new services will be integrated into the current services environment managed by Northrop Grumman, and that Northrop Grumman is contractually obligated to manage the services. However, Northrop Grumman indicated that it is not contractually obligated nor can it be responsible for services and providers it does not control, and that VITA will be responsible for integrating and managing new services.

Although VITA and Northrop Grumman disagree on their responsibilities during the transition to the new service model, both parties recognize that the current contract may need to be amended to clarify their respective responsibilities. Both parties indicated they would like to discuss contractual issues but have not yet had substantive, productive conversations. VITA, in consultation with the Office of the Attorney General, should pursue all avenues necessary to resolve the disagreement over Northrop Grumman's responsibilities for managing services during the transition period, while protecting the rights of the state.

The state's transition-related financial obligations have not been discussed

VITA and Northrop Grumman have not had substantive discussions about what the state's financial obligations to Northrop Grumman will be after services have been terminated. Although these obligations are defined in the Northrop Grumman contract, the parties have

¹ An MSI, or Multisupplier Service Integrator, is a single contractor that is responsible for coordinating IT services provided by multiple service providers. The MSI will be given authority over suppliers through the state's contracts with individual service providers and a series of operational agreements between the MSI and the providers.

already disagreed on how several other sections of the contract should be interpreted. Up-front discussions could ensure that the state's financial obligations are mutually understood and help avoid future disputes.

VITA and Northrop Grumman could potentially disagree over the terms and conditions of individual service terminations, which could result in the state continuing to be charged for services it believes have been terminated. Northrop Grumman charges the state for each service it provides. Northrop Grumman indicated it will stop billing for a service when the service is fully terminated but will continue to assess charges as long as some aspect of a service is still active. The state could therefore continue to be charged for services it believes have been terminated.

The state is contractually obligated to pay several one-time costs when services are terminated. The state's plan is to terminate Northrop Grumman services for "convenience." Under this type of termination, the state is obligated to pay "exit" and "resolution" fees. These fees pay for the acquisition of Northrop Grumman-owned assets and are intended ensure that the company recovers the cost of its capital investments and expenses associated with service terminations.

The state is terminating services in waves, and so some one-time fees may apply only in part. For example, there are one-time exit and resolution fees for "Data Center (Mainframe/Server)" services. The state is terminating the mainframe and server components at different times, so these fees may need to be divided between the two termination events.

VITA, in consultation with the Office of the Attorney General, should pursue all avenues necessary to resolve terms and conditions related to planned service terminations and the state's financial obligations afterward, while protecting the rights of the state.

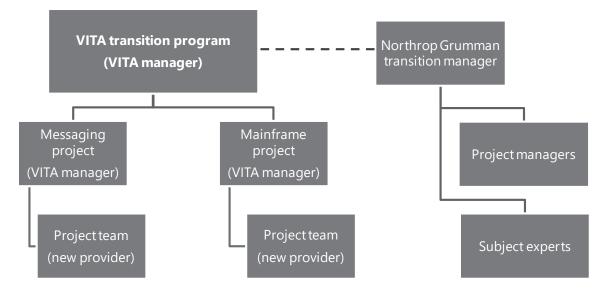
VITA has established a structure for managing transition but has not developed detailed plans

The IT services transition is being managed by VITA as an IT program over a series of projects. The program and its underlying projects are subject to the state's IT standards and must follow the same oversight and planning requirements that apply to all other state IT programs and projects. VITA has established a structure for managing transition but has not yet developed the detailed plans that are needed to guide the effort.

VITA has established a transition program management office and individual transition projects for messaging and mainframe (Figure 2). The program and project managers were appointed by VITA in July and August 2016. The program manager will work with Northrop Grumman's transition manager to oversee the effort. VITA's project managers will be supported by project teams from the new providers and Northrop Grumman, and Northrop Grumman's subject experts.

FIGURE 2

Transition program management structure



SOURCE: VITA and Northrop Grumman interviews.

VITA has not yet completed detailed plans for the transition program, even though the two initial projects are underway. Program plans are needed to effectively direct and coordinate underlying projects. For example, program plans identify interdependencies in project schedules and how new IT services will be integrated together. VITA needs to develop detailed program plans that provide clear direction to all parties before major transition activities begin in late 2016.

VITA's program plans should look to identify and address likely contingencies associated with upcoming transition projects. For example, a major project will be transitioning the state's servers. Many of these servers may have to stay in place at the state's data center or agency locations even after they are transitioned to new providers. VITA should work with Northrop Grumman to plan for this likely contingency.

Project-level plans are also required for successful transition. Project plans will direct specific transition activities, such as the technical work required to switchover from the old service to the new one. Much of the information needed for project-level plans will not be available until after VITA has selected new service providers.

Northrop Grumman indicated that the lack of clear, actionable plans has limited its ability to prepare for upcoming transitions. For example, Northrop Grumman did not know what technical tasks it would need to accomplish for the messaging transition project until after the contract for new services was awarded. Although detailed plans are essential, VITA indicated that some of the detail Northrop Grumman has asked for will not be available until after new service providers are selected because project plans must be tailored to the new provider's unique service offering.

Northrop Grumman indicated that VITA's plans need to account for the impact that transition will have on existing services, so that services are not disrupted. For example, IBM mainframe services share some infrastructure with other services that are not yet being terminated. Northrop Grumman indicated that additional technical planning is needed to determine how these other services will continue to be provided after mainframe services are terminated. Northrop Grumman indicated that consideration of these technical concerns is essential for reducing the risk associated with service transitions, and the time required to identify and resolve concerns should be incorporated into VITA's program and project timelines.

Most Northrop Grumman services stable but a few experienced declining performance or unexpected cost increases

Under contract with VITA, Northrop Grumman provides central IT services to state agencies. Agencies require high quality, affordable services to carry out business operations. Transition activities could affect service delivery. There is also risk that service quality may decline and costs could increase as the end of the contract approaches. The state needs Northrop Grumman to improve or maintain its current service quality and pricing through the transition period and on to the end of the contract in July 2019. Northrop Grumman stated that it is committed to fully performing its obligations, including maintaining the cost and quality of IT services through the end of its contract with the state.

Northrop Grumman services generally meet minimum performance requirements but some measures declined in past year

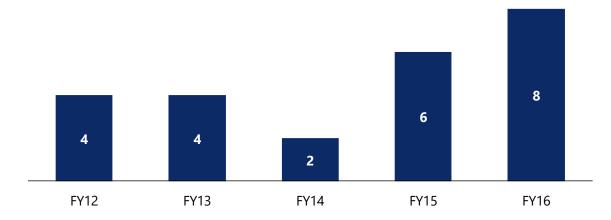
The main measures used to evaluate Northrop Grumman's performance are the service-level agreements set forth in the Northrop Grumman contract.² Most service-level agreements are performance measures for individual services, such as data center availability and network connectivity. Some service-level agreements cover several service areas, such as resolution of service outage incidents. Northrop Grumman has generally met its service-level agreements over the past five years, but some performance levels have declined in the past year.

Northrop Grumman has consistently performed well against its service-level agreements for security, mainframes and servers, and voice and video services. With few exceptions, Northrop Grumman has met its minimum performance requirements for these services, and overall performance levels have remained steady or trended upward in the past year.

Performance was also generally positive for messaging, help desk, and desktop services. Northrop Grumman has met almost all its minimum performance requirements for these services, even though a few individual performance measures within these services declined in the past year.

² There are currently 53 service-level agreements within eight broad service categories. The agreements measure service performance across all state agencies and are not indicative of the quality of services provided to a given agency.

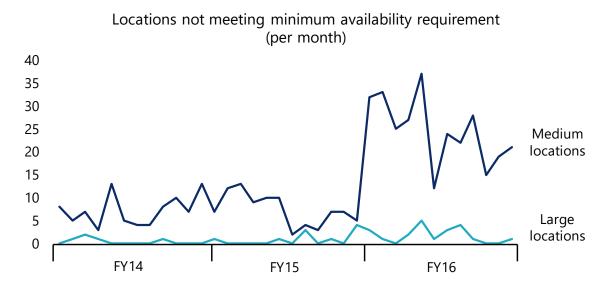
FIGURE 3 Frequency of major service outages has increased



Months with at least one "severity 1" incident

SOURCE: Northrop Grumman service level agreement reports. NOTE: Severity 1 incidents cause a complete work stoppage affecting one or more agencies.

FIGURE 4 Data network availability problems increased in past year



SOURCE: Northrop Grumman service level agreement reports.

NOTE: Data for service level agreements that measure Wide Area Network connectivity for large and medium locations. This trend was also evident at small locations. The trend was also observed in all types of locations using two other measures of network availability: Local Area Network switch connectivity and router connectivity.

Two of Northrop Grumman's services experienced a decline in performance in the past year: incident resolution and data network services. Northrop Grumman missed several of its monthly minimum performance requirements for incident resolution services in the past year. The frequency of "severity 1" service outages—incidents that cause a complete work stoppage affecting one or more agencies—increased relative to prior years (Figure 3). Incidents can be caused by factors outside Northrop Grumman's control, but an uptick in these types of incidents may be an indicator of other performance issues. A greater number of agency locations experienced network availability problems within the past year (Figure 4). Agencies rely on data networks to conduct their day-to-day operations.

VITA should ensure Northrop Grumman identifies and addresses the underlying causes of declining performance in incident resolution and data network services.

Charges for two Northrop Grumman services unexpectedly increased

Northrop Grumman's overall service charges have regularly increased in recent years, with an average increase of three percent expected from FY16 to FY17. Price increases are mostly driven by changes in service use by state agencies and contractually required cost-of-living adjustments that are performed every year.

In addition to the expected increases, Northrop Grumman unexpectedly increased its charges for two services: (1) Northrop Grumman is charging an additional \$5.5 million for Unisys mainframe services from July to December 2016; and (2) over the past two years, Northrop Grumman claimed the state owes \$4.2 million more than VITA believes is owed for Microsoft licenses and fixed fees.

VITA has refused to pay the additional charges and has declared Northrop Grumman to be in breach of contract. In both cases, Northrop Grumman increased its charges after entering into new contracts with third-party providers. VITA maintains that the state has a managed service agreement with Northrop Grumman and is not obligated to pay more when the company's underlying costs increase. VITA indicated its position is consistent with advice given by the Office of the Attorney General. Northrop Grumman's counter-argument is that the new contracts were entered into in good faith and that the state is obligated to pay.

Disputed charges: Unisys mainframe services

Starting July 2016, Northrop Grumman increased the capacity of its Unisys mainframe and correspondingly increased the amount it charges the state for Unisys services by \$914,000 a month (an increase of 76 percent). The new capacity far exceeds the state's needs, and by the time Unisys mainframe services are expected to be terminated in December 2016, Northrop Grumman will have charged the state \$5.5 million for the additional capacity.

Northrop Grumman indicated that VITA failed to choose one of the options that would have provided capacity in line with the state's needs, but these options would also have increased costs. One option would have doubled the per-unit cost of Unisys services, for a total of \$3.3 million in additional charges from

July to December 2016. Other options would not have increased near-term charges but would have obligated the state to continue paying for Unisys services after they are terminated. Under these terms, the state would have been charged an additional \$25.3 million from December 2016 to July 2019.

Disputed charges: Microsoft licensing

Northrop Grumman has claimed the state owes \$4.2 million more than VITA believes is owed, including \$800,000 for Microsoft licenses and \$3.4 million in additional fixed fees. Microsoft license costs are expected to change annually under the Northrop Grumman contract, but VITA indicated that Northrop Grumman billed the state for the wrong number of licenses for 2014 and 2015. VITA is disputing the charges because the company did not follow the procedure for counting licenses that the two parties had documented and agreed upon. Northrop Grumman indicated that the procedure, which it helped develop, was impractical and could not be implemented. VITA indicated that the fixed fees are expected to remain at the same level regardless of whether Northrop Grumman's costs increase under its agreement with Microsoft.

Cost disputes draw time and effort away from disentanglement and transition planning, and could negatively impact these efforts. VITA, in consultation with the Office of the Attorney General, should pursue all avenues necessary to resolve the disagreements with Northrop Grumman on the proper charges for Unisys mainframe and Microsoft licensing services, while protecting the rights of the state.

Conclusion

VITA and Northrop Grumman currently disagree over key transition duties and ongoing service obligations. These disagreements could harm the state's effort to transition to new services and could affect the cost and quality of existing services. VITA, in consultation with the Office of the Attorney General, should pursue avenues necessary for resolving these disagreements while protecting the rights of the state. Avenues that could be pursued include contractually-defined dispute resolution procedures and legal remedies, if necessary. VITA actions should address both current disputes and areas of potential disagreement. VITA should also work with the Office of the Attorney General to identify areas where contractual amendments are needed to facilitate transition while protecting the state from added or unnecessary risk and costs.

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This memorandum captures the observations and recommendations of JLARC oversight staff. This memorandum does not constitute a legal opinion or interpretation of the contractual obligations of VITA or Northrop Grumman and should not be used to justify the legal positions of either party.