REVIEW OF COST ALLOCATION PLAN,
BILLING, AND COLLECTIONS
FOR THE
VIRGINIA INFORMATION TECHNOLOGIES AGENCY

JUNE 2008

Auditor of Public Accounts
COMMONWEALTH OF VIRGINIA

AUDIT SUMMARY

In the spring of 2006, the Virginia Information Technologies Agency (VITA) proposed an interim billing methodology, which would use the existing billed amount and an add-on percentage, pending the implementation of new fee for service rate in July 2008. The Federal Government did not accept the VITA interim billing methodology and required VITA and the Commonwealth of Virginia to develop and use a fee for service billing methodology for all services. VITA, therefore, developed and proposed a methodology for service billings using a number of estimates, available historical information, and other factors.

In accepting VITA and the Commonwealth's service billing methodology, the Federal Government required that the Auditor of Public Accounts review the implementation of the service billing methodology and procedures that VITA used to implement the billing. The current billing methodology may change with a new billing procedure by the infrastructure partner on July 1, 2008.

Generally, we found that VITA is following the guidance that it agreed to follow for the Federal Government. As Northrop Grumman implements resource unit billing to VITA, the Cost Allocation Plan development and reconciliation process will likely become less complex; however, this process is dependent on the implementation of resource unit billing and the completion of asset inventories scheduled now for December 2008.

This report contains a number of findings and concerns that we found during our review.

-T A B L E O F C O N T E N T S-

REVIEW OF COST ALLOCATION PLAN, BILLINGS, AND COLLECTIONS

Background

In the spring of 2006, the Virginia Information Technologies Agency (VITA) proposed an interim billing methodology, which would use the existing billed amount and an add-on percentage, pending the implementation of new fee for service rate in July 2008. The Federal Government did not accept the VITA interim billing methodology and required VITA and the Commonwealth of Virginia to develop and use a fee for service billing methodology for all services. VITA, therefore, developed and proposed a methodology for service billings using a number of estimates, available historical information, and other factors.

Generally, we found that VITA is following the guidance that it agreed to follow for the Federal Government. As Northrop Grumman implements resource unit billing to VITA, the Cost Allocation Plan development and reconciliation process will likely become less complex; however, this process is dependent on the implementation of resource unit billing and the completion of asset inventories scheduled now for December 2008.

VITA is the Commonwealth's consolidated, centralized information technology (IT) organization. VITA is responsible for the operation of the IT infrastructure, including all related personnel, for the executive branch agencies declared by legislature to be "in scope." In November 2005, the Commonwealth entered into a Public-Private Partnership (Partnership) with Northrop Grumman through signing a Comprehensive Agreement. In doing so, effective July 2006, VITA turned the management of the IT infrastructure, including security operations, over to Northrop Grumman for those agencies using VITA.

VITA bills its customer agencies for services provided by the Partnership as an internal service organization. These agencies pay for services using appropriated funds including amounts received for Federal grants and contracts.

Therefore, VITA must submit a Cost Allocation Plan (CAP) to comply with federal laws and regulations. This review focuses on the CAP that VITA submitted to the Federal Department of Health and Human Services' Division of Cost Allocation (DCA) for approval. In addition, we also reviewed how VITA implemented this plan by reviewing their management of billing and collections.

Federal Requirements

The Federal Office of Management and Budget created Circular A-87 to inform Federal agencies what costs and methodologies state governments and other entities can use in establishing cost allocation plans. The Circular provides a uniform approach for determining costs and provides guidance to establish an appropriate method to identify, assign, allocate, and bill costs on a reasonable and consistent basis. The following are basic guidelines for allocable costs from Circular A-87:

- A cost is allocable to a particular cost objective if the goods or services involved are chargeable or assignable to such cost objective in accordance with relative benefits received.

- All activities which benefit from the governmental unit's indirect costs, including unallowable activities and services donated to the governmental unit by third parties, will receive an appropriate allocation of indirect costs.

- Any cost allocable to a particular federal award or cost objective under the principles provided for in Circular A-87, the entity may not charge to other federal awards to overcome fund deficiencies, to avoid restrictions imposed by law or terms of the federal awards, or for other reasons.

- Where an accumulation of indirect costs will ultimately result in charges to a federal award, the entity must prepare a CAP.

Circular A-87 also describes other CAP submission requirements. These other submission requirements include further information about services provided, expenses included in the cost of services, the method for distributing the costs of services to benefiting agencies, and a summary schedule illustrating the allocation of services to specific agencies.

Many federal agencies require State and other government units to certify that their cost allocation plans follow Circular A-87, contain only allowable costs, and consistently treat costs between federal and non-federal awards and activities. Additionally, federal agencies require states to prepare a comparison of actual allocated central service costs to the estimated costs, as well as a comparison of revenues versus allowable costs report.

Finding 1:

VITA does not provide sufficient information in certain portions of the report to compare revenues versus allowable costs. Specifically, the report does not have a comparison by product or service line. As a result, internal management and external stakeholders, including the federal government, cannot determine whether the revenue for individual products and services are appropriate to cover associated, allowable expenses for those individual items.

In addition, VITA had a reporting error, which showed revenues exceeding allowable costs by $112.5 million on one line item and reported allowable costs exceeding revenues by $92 million on another line item. Management believes that internal miscoding caused the misclassification of amounts and that by combining several line items, including these two, the report would more accurately reflect VITA's revenues and allowable costs.

VITA should revise and resubmit this report by reclassifying amounts, as appropriate, and providing further detail by product line and service. In addition, management should evaluate and modify the process for preparing this report and establish formalized policies and procedures.

<u>Cost Allocation Plan</u>

As VITA transitioned, their billing methodology to charge state agencies for IT goods and services evolved. Beginning in 2004, VITA began using the direct bill method. Management developed this method to recover direct costs of payroll and products purchased plus an administrative fee of 5.52 percent to cover minimal overhead associated with transition issues. Therefore, the administrative fee was the only financial impact on customer agencies. However, for several larger agencies, the administrative fee would significantly increase total technology costs. The direct bill method was an interim billing method VITA developed until management could establish a permanent billing solution.

Consequently, VITA developed chargeback agreements for goods and services provided to their customers. VITA and individual customer agencies established these agreements in Memorandum of Understandings (MOU) between the two parties. This approach used historical spending data of all "in-scope" agencies to develop service rates that were unique to each agency. VITA provided agencies with a current count of assets and an agency specific estimate of expenses to support that current level of assets. VITA based this agency specific estimate of expenses on the agency's previous years spending, which management knew because of the data captured under direct bill.

Once VITA and the agencies agreed on both the estimated expenses and quantity of assets, VITA developed a rate calculation specific to the agency. Management had difficulty establishing accurate and mutually acceptable charges because of a lack of historical spending data upon which to base the charges. This agency specific rate structure could cause differences between agencies for the services provided and the associated costs charged. VITA experienced problems obtaining customer acceptance of this methodology; they also struggled with securing DCA approval of the associated CAP. For that reason, VITA management developed a new standardized decentralized rate structure.

Submission of the Cost Allocation Plan

VITA submitted a CAP to DCA, in August 2006, in an effort to resolve issues noted in previous attempts to create a reasonable and consistent method to charge user agencies. DCA has responsibility for reviewing the CAP to ensure that the proposed costs and allocation methodologies complied with federal requirements. DCA did not agree with the new MOU cost allocation and billing methodology for several reasons.

DCA stated that the monthly billing imposed by VITA on state agencies was not reflective of actual charges resulting from the standard service rates; instead, the billings were reflective of historical costs incurred during the previous year's accounting cycle for each specific agency. Therefore, VITA would bill state agencies for services based on past expenses rather than the actual cost of providing goods and services.

DCA also stated that the cost allocation method did not provide a basis for state agencies to specifically identify billed services to benefiting programs, because VITA did not itemize billing invoices sufficiently to reflect the type of services actually rendered. An itemized billing invoice would serve as an instrument that would assist state agencies in properly allocating and charging federal programs accordingly.

Finally, DCA stated that the proposed usage of agency specific rates would make it infeasible for VITA to reconcile costs at the end of an accounting cycle by function. DCA believes that the nature and structure of the contract with Northrop Grumman makes it difficult to reconcile costs.

As a result of their review of the CAP, in September 2006, DCA recommended that all federally funded Commonwealth agencies impacted by this proposed methodology consider deferring payments until VITA provides sufficient information on equitable charges it assesses state agencies. This caused a number of Commonwealth agencies to defer payments to VITA. However, DCA later gave VITA limited approval for the proposed methodology for specific services billed by VITA, including legacy computer services and telecommunication services.

Revised Cost Allocation Plan

In order to address DCA's concerns with the previous CAP submission, VITA submitted a revised CAP on November 16, 2006 to DCA for review and approval. The CAP outlined specific steps taken to resolve the noncompliance issues raised in the previous CAP submission. In order to accomplish these steps, several federally funded state agencies and DCA officials helped VITA develop the revised CAP.

VITA does not consider this service rate structure to be final and anticipates revisions each year upon reconciliation, including the adoption of a charge system based on a consolidated infrastructure delivering a range of standard services using standardized equipment. VITA anticipates the rate method to change as the partnership evolves to reduce the complexities of cost allocation.

Within this new CAP submission, VITA provided detailed information regarding all allowable expenses, both direct and indirect, that are necessary to provide services offered to its customers. VITA also included in the CAP a list of all milestone payments in the contract with Northrop Grumman during the fiscal year, a description of the transition activities that fall under the milestone payments, and an allocation methodology for each payment.

Decentralized Remote Services

Decentralized remote services are comprised of the hardware, software, and personnel costs associated with supporting the infrastructure devices located at agency locations statewide. Agencies pay for decentralized remote services based on the number of active assets in each individual category of decentralized remote services. These supported devices include desktops, laptops, personal digital assistants, servers, network equipment, and shared local area network (LAN) devices.

When developing the rates for this billing category, VITA's goal was to develop standard rates that reflect the costs associated with providing specific services. VITA considered the following factors in determining the rates for desktops and laptops: average purchase cost of assets, changes in price trends, time period projections, maintenance and software estimates, service time, and the estimated per hour service charge. Management estimated the average cost of desktops at $1,100 and laptops at $2,020, using a five year refresh cycle. Once they developed these average costs, VITA added additional amounts for maintenance, software, service, Northrop Grumman shared direct costs, and VITA overhead expenses. These factors account for 24 percent of the final billing amount and are estimated to recover indirect expenses, such as costs related to the data center, technical indirect expenses, basic overhead and administration expenses, and other administrative functions.

VITA used similar calculation methods for developing the rates for servers and shared LAN devices; however, VITA added a monthly enterprise device share charge for servers. This additional charge recovers the cost of server storage and backup, including devices and support. The average monthly enterprise device share rate is $135.91 per server, which management calculated using historical data. In addition, VITA adjusted this amount based on the size of the server since smaller servers should require less storage and backup.

Finding 2:

VITA used a number of spreadsheets to calculate and create rate structures based on estimates, projections, and other factors, including limited historical spending data. This was a time-consuming and labor-intensive process requiring VITA employees to gather information from a number of different sources, in order to create appropriate estimates and projections. In general, we found that VITA did not fully document, support, and explain these spreadsheets.

In addition, only one individual within the agency had the comprehensive background knowledge to explain the development of the calculations. Management did not appear to adequately review these spreadsheets, at the time of their creation, which resulted in the lack of documentation and a calculation error totaling $1.9 million. This error did not appear to have a significant impact on VITA rates.

VITA should fully document, support, and explain these spreadsheets. Management should then review this documentation to ensure adequacy and reasonableness. VITA should also develop a standard policy to outline documentation expectations for future rate development. It is important that VITA management complete the review for adequacy since these spreadsheets will represent the baseline for future CAP comparisons.

Since servers have a wider range of purchase prices, VITA grouped these devices into purchase tiers based on the asset's original purchase price listed in the asset inventory system. Each tier has a different billing rate. The asset's original purchase price came from a number of different sources. VITA obtained purchase information from the individual agencies for those assets that agencies procured before VITA provided this service. For those assets purchased by VITA and Northrop Grumman, management recorded the information directly in the asset inventory management system.

Finding 3:

During our review, we found several instances where the original purchase cost listed was inconsistent with VITA's methods used to establish the prices. We found many assets, which appeared to have the same description, model, and purchase date having different listed purchase prices, including zero dollars. Some deviations result from the same makes and models having different configurations. For those assets with a listed purchase price of zero, VITA placed and billed these assets in the lowest rate tier. VITA billed at the lowest rate to avoid over-charging customers for these assets because management believed there were few other options that would not negatively impact customers.

By not using consistent server cost information, VITA has for some agencies created lower billings. In addition, VITA may not recover all of its costs to provide services when it inappropriately places assets in a lower tier, forcing VITA management to raise overall server and shared LAN rates.

Since VITA decided to use original purchase price to determine the billing rate tiers, management must ensure this information is reasonable and has equitable billing results. Management should review its current asset listing to identify those assets that are outliers or do not have a reasonable original purchase price. Then, VITA should develop a new method for adjusting these assets to a reasonable price tier. This concern should only exist temporarily because as Northrop Grumman replaces assets, the Partnership correctly enters information into the asset inventory system.

Service Option Classifications

VITA provides different service levels to different customers for different assets. The service options for decentralized services are as follows.

- Service Option 1- Assets that are receiving full service
- Service Option 2- Assets that exclude purchase price
- Service Option 3- Assets that exclude direct support (labor)
- Service Option 4- Assets that exclude VITA central hosting services

Generally, the majority of billed devices fall under service option one, where the Partnership provides full service for the assets, including a "refresh" after a pre-determined number of years. This option includes the estimated cost of equipment purchase, installation, maintenance, surplus, software licensing, patches and upgrades, direct labor, and indirect expenses.

Service option two removes the estimated cost of equipment purchase from the full service rate. VITA primarily offers this option to accommodate where the agency initially purchased the equipment with federal funds. Generally, once the Partnership replaces this asset in the normal "refresh," VITA places the new replacement asset in service option one. Alternately, when an agency uses a special or one-time federal grant for technology equipment, the agency requests VITA to purchase the equipment and reimburses VITA for the full purchase cost of the equipment under the cost-plus model; then, the agency pays the "excluding purchase price" monthly service amount with the asset classified under service option two.

Service option three removes the estimated cost of labor because a limited number of agencies have an agreement with a third-party vendor to provide seat-management-style direct support services. VITA bills some assets under service option four, where an agency has an agreement with VITA to separately pay for hosting services that include direct operating system engineering support. Under this option, VITA excludes the hosting and engineering support charges, direct labor costs, and the hardware and software costs associated with enterprise devices.

In addition to the four service options listed above, VITA also created service option five, which is a unique category. Equipment placed in service option five is when VITA management and/or the customer believe VITA should exclude the assets from the agencies' bill due to special circumstances. For example, VITA management placed certain equipment in this category used by Partnership employees physically located at an agency. This would ensure only assets used by agency personnel are included in the agency's bill. In addition, when VITA encountered out-of-scope assets, such as network copiers that agencies lease from a third party vendor, VITA placed these devices in service option five.

As of fiscal year 2007, there were 233 assets of the approximately 83,000 assets classified in service option five; however, this count is not constant, as VITA continually adds or removes assets from this list. VITA management created service option five after realizing that not all of the Commonwealth's IT assets currently fit into one of the other service options.

Finding 4:

VITA has not established a written internal policy describing when and why VITA employees may move assets to service option five, as well as a formal request and management approval process for moving assets. In addition, VITA management does not have a formal process for monitoring the assets in service option five and evaluating whether each asset should continue to remain in service option five. Due to the lack of internal guidance and formal processes, VITA did not document the reason for moving the assets to service option five. Without documentation, management cannot readily determine why internal employees moved these assets to this option and whether they should remain under this option.

VITA should create formal, internal policies, procedures, and process for service option five assets. In addition, management should determine why current assets are in service option five and determine whether they should remain in this category.

Finding 5:

Internal employees moved a number of assets to service option five because these assets would not be included in the "refresh" cycle and may only receive minimal assistance from the help desk. Therefore, VITA employees decided that these assets should not be included in the agency's bills. However, agencies may still request that the Partnership respond to help desk calls for these assets and thus cause the Partnership to provide services to benefiting agencies that do not incur any additional costs. If this occurs, federal regulations require VITA to impute revenues and include this calculation in the comparison of revenues to allowable costs report the Commonwealth submits to the federal government. Since the Partnership is not sure whether it provided any services related to these assets, we could not determine whether VITA should have calculated and included imputed revenues in the comparison report.

Management should determine whether the Partnership should provide services to those assets in service option five. If management chooses to provide services, VITA should bill agencies for these services. Otherwise, VITA must document the services provided, calculate imputed revenues, and include these "revenues" in the comparison of revenues to allowable costs report.

Miscellaneous Charges

For IT services provided outside of the VITA billing rate structure required by agencies, VITA provides a supplemental miscellaneous charge bill. Miscellaneous charges range from one-time charges to monthly recurring charges outside of the standard billing rate structure.

Finding 6:

Overall, VITA does not have adequate internal policies and procedures describing how the billing section should document its miscellaneous charges, adjustments, and any surcharges added. As a result, VITA does not consistently document and support these miscellaneous charges, adjustments, and surcharges. VITA should evaluate its miscellaneous charges and develop internal policies and procedures.

Billing

VITA bills agencies monthly through several billing systems. VITA separates bills into the following main categories: computer services, telecommunications, and decentralized services. Each of these billing categories has an applicable billing system as follows: Computer services - automated inputs; Telecommunications - monthly recurring charges in the TEAMS database, long distance from the vendor tape, and audio teleconference from a private vendor billing; Decentralized Services - billed by asset inventory system. The inventory amounts from the asset system are now the responsibility of Northrop Grumman who handles inventory management, as well as updating the asset management system. VITA obtains these inventory amounts in order to create individual agency bills based on these assets.

Finding 7:

Initially, Northrop Grumman could not provide detail to support the actual asset count billed to an individual agency for the total number of servers for one month. Later, Northrop Grumman provided new data, but could not explain why they made changes to the original asset data to get the revised inventory records. In addition, Northrop Grumman did not provide explanations for why there were significant fluctuations in the quantity and types of servers over several months for one agency.

Furthermore, Northrop Grumman reclassified a number of assets to new asset equipment types and then later reclassified those same assets to the original asset type. Once again, Northrop Grumman did not explain these reclassifications. The monthly billing amounts for these assets changed each time Northrop Grumman reclassified the asset equipment type, causing a financial impact on the customer agency. Finally, we noticed during our review of one bill, that VITA charged an agency twice for ten different assets during the same month, because Northrop Grumman listed these assets twice on the inventory records.

Although VITA management does have an inventory quality control process, VITA staff were not aware of several of these situations before our review. By not adequately monitoring Northrop Grumman to ensure that the inventory records are reasonable and accurate, management cannot ensure that VITA correctly bills customer agencies.

VITA management is in the process of expanding and intends to improve its current inventory management process. Northrop Grumman is currently working on an asset inventory reconciliation for all "in scope" agencies. Initially, VITA and Northrop Grumman plan to complete this process by April 2008 but the revised completion date is December 2008.

VITA completed an interim inventory change process in 2008, and VITA management is training key employees on new inventory processes. VITA management should continue to improve its asset inventory quality control process. In addition, VITA should continually evaluate its asset inventory to ensure that the quality control process is resolving concerns in all asset inventory areas.

Finding 8:

VITA does not have adequate policies directing Northrop Grumman on how to classify an asset's billable status and when to change this reclassification in the inventory management system. For example, VITA does not provide the Partnership a policy for classifying assets in use or in storage as "active" or "in-stock." In addition, VITA does not have consistent definitions for each asset equipment type, causing Partnership employees to question the coding of the asset's equipment type, as mentioned in the previous recommendation. Since VITA bases its billing on the appropriate classifications and counts in the inventory system, VITA management must provide the Partnership with detailed policies directing the classification and reclassification of inventory.

Without adequate internal policies and procedures, VITA cannot ensure that the Partnership treats assets consistently for billing purposes throughout the Commonwealth. Although we recognize that VITA does have some policies and procedures for asset inventory management, these policies and procedures do not provide the fundamental guidance needed to build more specific policies and procedures. VITA management should assess its current policies and determine where additional guidance is necessary. Then, VITA should establish formal asset inventory policies and procedures in these areas and communicate these to the Partnership.

Finding 9:

Currently, agencies contact a number of different sections or individuals within the Partnership when agency management questions a bill. Agency personnel are contacting Partnership employees, both VITA and Northrop Grumman, in various areas such as the billing section, asset inventory management, or on-site personnel. While VITA and Northrop Grumman try to assist the customer, they do not always notify the appropriate VITA billing staff of the concerns in a timely manner.

As a result, VITA's billing section may be unaware of the concern and cannot ensure that the matter is resolved in an efficient manner, ultimately causing untimely collection of past-due accounts. Management has tried to establish and communicate formal guidelines for resolving agency billing disputes that include notifying VITA's billing section.

Commonwealth of Virginia

Walter J. Kucharski, Auditor

Auditor of Public Accounts
P.O. Box 1295
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May 15, 2008

The Honorable Timothy M. Kaine
Governor of Virginia
State Capital
Richmond, Virginia

The Honorable M. Kirkland Cox
Chairman, Joint Legislative Audit
and Review Commission
General Assembly Building
Richmond, Virginia

We have reviewed the Cost Allocation Plan of the **Virginia Information Technologies Agency** (VITA) and are pleased to submit our report entitled "Review of Cost Allocation Plan, Billing, and Collections." We conducted this review in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

<u>Objectives</u>

Our objectives for the review of the Cost Allocation Plan, Billing, and Collections were to determine whether:

- the cost allocation plan is reasonable and in accordance with OMB Circular A-87;
- management appropriately implemented the plan through the billing and collection process; and
- the inventory reconciliation processes result in accurate numbers used to bill agencies.

<u>Scope and Methodology</u>

This review focused on the Cost Allocation Plan (CAP) in effect for fiscal year 2007. The purpose of the CAP is to identify, assign, allocate, and bill costs on a reasonable and consistent basis in accordance with OMB Circular A-87. We reviewed the CAP to determine whether it was compliant with OMB Circular A-87. In addition, we also reviewed how VITA implemented the CAP by reviewing their management of billing and collections.

<u>Exit Conference and Report Distribution</u>

We discussed this report with VITA management on June 12, 2008. Management's response has been included at the end of this report. This report is intended for the information and use of the Governor and General Assembly, management, and the citizens of the Commonwealth of Virginia and is a public record.

AUDITOR OF PUBLIC ACCOUNTS

BEM/wdh

COMMONWEALTH of VIRGINIA

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June 18, 2008

Mr. Walter J. Kucharski
Auditor of Public Accounts
Post Office Box 1295
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Dear Mr. Kucharski:

Thank you for the opportunity to comment on the recently completed "Review of the Cost Allocation Plan of the Virginia Information Technologies Agency (VITA)".

We are pleased that you were able to conclude that in developing the Cost Allocation Plan VITA is following federal guidance and guidelines, and overall we agree with the report's findings and recommendations. As we agreed, given the nature of the report, we understand no corrective action plan is required by your office to address these findings.

As always, we appreciate the time and attention that your staff devoted to this and other matters of mutual interest. We look forward to working with you in the future.

Sincerely,

Lemuel C. Stewart, Jr.

c: The Honorable Aneesh P. Chopra, Secretary of Technology
Judy G. Napier, Deputy Secretary of Technology
Members, Information Technology Investment Board

VIRGINIA INFORMATION TECHNOLOGIES AGENCY

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