

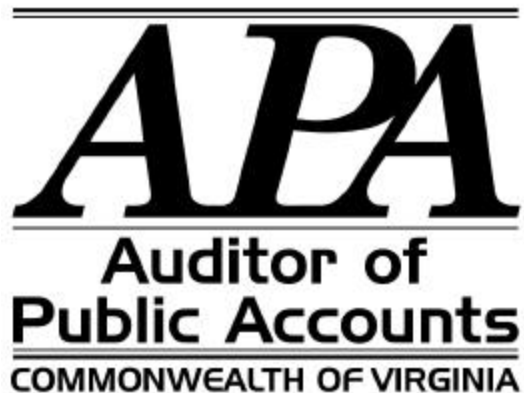
**COMMONWEALTH'S ELECTRONIC  
PROCUREMENT SYSTEM**

**eVA**

**RICHMOND, VIRGINIA**

**SPECIAL REPORT**

**MAY 31, 2002**



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Department of General Services Response to Status Report

Auditor Reply to General Services Response dated June 4, 2002

May 31, 2002

The Honorable Mark Warner  
Governor of Virginia

The Honorable Vincent F. Callahan, Jr.  
Chairman, House Appropriations Committee

The Honorable John H. Chichester  
Chairman, Senate Finance Committee

Gentlemen:

We have completed an examination of the Commonwealth's electronic procurement system, eVA, which is currently under development through a contract between the Department of General Services and American Management Systems.

In performing our work we reviewed the contract with American Management Systems (AMS), surveyed agencies that use eVA, analyzed eVA usage reports, obtained eVA training, attended weekly meetings of the interface development team, and met with General Services and the Secretary of Administration. As our report indicates, agency use of eVA is low, averaging 1.5 percent of the potential monthly purchases that could go through the system. To increase the use, our report identifies and describes three areas where General Services must focus their efforts:

- Development of interfaces between existing agency procurement systems and eVA;
- Development of an interface to capture small purchase charge card transactions; and,
- Improve vendor relations and increase vendor registration in eVA.

General Services planned that fees paid by vendors accepting orders through eVA would generate sufficient revenue to pay contract amounts guaranteed to AMS. The fiscal year 2002 legislative session ceased vendor fees as a source of revenue and instead required agencies to pay for the system. General Services plans to resume collecting vendor fees in fiscal year 2004, rather than agencies paying for the system. Increasing agency use of eVA during the next year is critical for generating sufficient future vendor fee revenue to pay AMS.

General Services anticipates completing eVA by December 2002 and we will continue to follow its development and issue periodic status reports. We discussed this report with the Director of the Department of General Services, the Director of the Division of Purchases and Supply, and the Secretary of Administration on May 31, 2002.

AUDITOR OF PUBLIC ACCOUNTS

KKH:whb  
whb:20

## Introduction and Background

In March 2001, the Department of General Services (General Services) launched eVA as an electronic procurement system. We have completed an interim review of eVA. We conducted this review by examining the contract, assessing system functionality, surveying agencies using eVA, interviewing General Services' staff, and analyzing the procurement and payment activity.

Our report contains background information about the Commonwealth's procurement policies, use of independent financial systems, and recent studies regarding procurement initiatives. The remainder of the report focuses on eVA, its design, functionality, funding, and usage, as well as areas needing attention to increase agency and vendor participation.

## ***Procurement Rules and Regulations***

The Virginia Public Procurement Act (VPPA) was effective in 1983, forming the basis for public procurement practices in the Commonwealth. The Code of Virginia designates General Services' Division of Purchases and Supply (DPS) with responsibility for establishing and administering statewide purchasing rules and regulations for materials, equipment, supplies, printing, and non-professional services based on the VPPA, as well as monitoring compliance with those requirements. DPS issues the Agency Procurement and Surplus Property Manual that provides procurement methodologies to be used depending on the dollar value and nature of the purchase.

DPS manages centralized purchasing activities and delegates to each agency certain levels of procurement authority, ranging from \$50,000 to unlimited, based on that agency's internal control environment and the commodity in question. Generally, larger agencies involved with more frequent and sophisticated types of procurements have received higher levels of delegated procurement authority. The following schedule reflects how DPS has delegated procurement authority based on broad categories.

Capital Outlay:	Services:	Goods:
Agencies have full authority for Professional Services and 110 percent of costs for capital outlay construction consistent with the Division of Engineering and Building's Manual.	Agencies have full authority for all services, except Telecommunication and Information Technology. The Department of Information Technology has full authority over these services.	Eleven agencies have authority up to \$100,000, excluding printing. Twelve agencies and seven universities have unlimited authority. All other agencies have full authority up to \$50,000.

Some entities, including authorities, boards, commissions, cities, counties, towns, and other political subdivisions that fall under the VPPA, are exempted from state oversight. In addition, a limited number of entities are exempt from all or a portion of the VPPA.

## ***Development of Decentralized Systems***

In the early 1980's, the Department of Accounts implemented the Commonwealth Accounting and Reporting System (CARS) to function as the statewide accounting system and as a means of monitoring agency's compliance with budget and appropriation limits. The Department of Accounts still maintains CARS as the Commonwealth's official financial record, but has permitted agencies to implement their own independent accounting systems under the condition that they must transfer data from their system to CARS.

In the 1990's, client-server based accounting systems grew in popularity and made operating financial accounting systems more affordable than traditional mainframe based systems, such as CARS. These systems range in complexity; however, the majority represent fully integrated financial systems, moving transactions through the entire procurement, purchasing, payment processes, facilitating automated approvals, and updating budgeting, accounting, inventory, and fixed asset systems along the way.

Colleges and universities have always operated independent accounting systems even before the introduction of CARS. Many agencies have justified the need for independent systems because CARS has never provided billing, revenue, and account receivable functions. In addition, many agencies need to control their operation in greater detail, allowing for better budget management and encumbrance tracking. Agencies using these systems have realized efficiencies in automating previously manual processes. The prominent vendors for these systems in the Commonwealth are PeopleSoft and Oracle and all include a procurement module that modernizes and automates much of the procurement process.

As shown in our report, "Review of Financial Systems Implementation" dated November 28, 2001, within the last five years many state agencies and institutions of higher education have replaced or implemented independent financial accounting systems. We have identified approximately 35 agencies having independent financial systems and less than five additional agencies currently considering implementing a system or upgrading their existing system. The majority of the remaining CARS user agencies will never require functionality beyond what CARS provides and therefore may never attempt to implement an independent financial or purchasing system.

### ***The Governor's Task Force***

In September 1998, Governor Gilmore created the Commonwealth of Virginia Procurement Assessment Task Force through Executive Order 30 and extended their existence through Executive Order 40 issued in March 1999. The purpose of the Task Force was to identify best procurement practices in the private sector, develop long-range procurement goals and performance measures for the Commonwealth, draft a procurement strategic plan, and draft revisions to the Virginia Public Procurement Act for consideration by the General Assembly.

The Task Force included a cross section of state government officials along with representatives from the private sector and federal government. The state government officials represented state agencies and institutions where the recommendations would have a direct effect on their operations. Research associates from George Mason University as well as General Services staff provided information and data on best practices nationally and the current state of procurement in the Commonwealth. The Task Force sought additional information through the use of focus groups relating to agency procurement professionals, capital outlay, local governments, and information technology as well as through the use of vendor surveys.

In February 2000, the Task Force released a report on their recommendations to improve Virginia government's procurement systems. Their report recognized that creating one centralized procurement system would most likely improve competition since vendors would not have to separately contact each agency to bid on goods and services. However, the Task Force reported that centralizing a procurement system would be a complex project and that many agencies already had automated procurement systems in place. Their specific recommendations included, but were not limited to:

- requiring all state agency solicitations over \$30,000 to be available from one website, using a uniform format;
- centralizing, enhancing, and requiring vendor registration on the website; and

- targeting July 2002 as the date for full implementation of front-end electronic procurement, i.e. the central website.

### Defining the Electronic Procurement Solution

In May 2000, Governor Gilmore issued Executive Order 65, which mandated General Services to implement an electronic procurement system by March 2001 for all agencies. The Executive Order recognized the benefits derived from use of the Internet for procurement, but did not specify the nature of the electronic procurement system or whether General Services was to consider the Task Force recommendations.

In June 2000, General Services issued a Request for Proposal (RFP) in which they defined the electronic procurement system (eVA) as providing a single face of Virginia government procurement, streamlining processes across entities, and allowing the capture and analysis of procurement transactions. General Services agreed with the Task Force report that centralizing a procurement system would be complex; therefore, the eVA vision was not to replace the existing procurement systems with a centralized system, but to supplement these systems by allowing them to do business with vendors electronically using a central website. General Services believed eVA would allow the Commonwealth to capitalize on its purchasing power and increase organizational efficiencies. Specific requirements for eVA included:

- an e-mall for searching purchasing options;
- a requisition and purchasing system for all levels and types of purchases;
- electronic posting and distribution of procurement related notices;
- data warehousing of vendor information and procurement/purchasing activities;
- central vendor registration;
- virtual surplus inventory;
- reverse auctioning; and
- electronic receiving and invoicing.

Ten vendors submitted proposals in response to the RFP and in October 2000, General Services awarded the contract to American Management Systems (AMS) to provide the Commonwealth's electronic procurement system, eVA. General Services estimates that a systems development project of this size normally takes 3-5 years. However, Governor Gilmore's mandate caused General Services to place eVA on an aggressive timeline for implementation, releasing certain functionalities within 5 months of signing the contract.

## Functionality of the System

Under the contract, AMS functions as the application service provider that makes eVA available to the Commonwealth and customizes the system as General Services requests. Under this arrangement the Commonwealth does not physically own the eVA system or have significant rights beyond being a user of eVA. The Commonwealth does own the purchasing data collected through eVA. In the event AMS discontinued providing eVA, the purchasing data, but not the system, would convey to the Commonwealth.

Agencies and vendors access eVA through the Internet. Vendors register on-line and provide product and catalog information. Agencies use search features to locate desired products and then place orders with vendors. In addition, agencies can use their Small Purchase Charge Card to pay for goods if accepted by the vendor or process the payment using traditional methods. The current system functionality is much like any customer buying system used by on-line companies such as Amazon and Dell. Additional functionality to support online solicitations is still under development.

General Services states eVA will provide the Commonwealth benefits in four key areas: selection, buying methods, process management, and decisions. General Services also identifies several benefits for vendors including: one-time registration; single source for access to Virginia government and notification of solicitations; as well as electronic order receipt.

Finally, General Services believes eVA will provide agencies with more choices and less costly goods. We have obtained no evidence or studies to show that state governments realize better prices using an electronic procurement system. General Services has provided information that suggests major private companies, such as IBM, and the federal government, have realized savings as a result of electronic ordering and invoicing; however, eVA does not currently provide on-line invoicing capabilities, decreasing the efficiencies that could be realized by this benefit. In addition, major private companies tend to have a limited number of partnership agreements; whereas, the Commonwealth looks to maximize competition with the most vendors possible. These distinct differences make it difficult to compare the Commonwealth to other industries and predict the savings.

## The Original Funding Model

General Services did not receive an appropriation to either purchase or develop eVA. Instead, the Appropriation Act (Chapter 1073) required General Services to explore other financing strategies in consultation with the Department of Planning and Budget. Through the contract with AMS, the Commonwealth chose a “reverse” or “self-funding” model, which placed the initial capital outlay burden on AMS. In addition, the Department of Accounts provided a \$3 million dollar treasury Loan for the development and implementation of eVA with repayment coming from agencies and institutions.

Under the funding model with AMS, vendors paid either a basic (\$25/year) or a premium (\$200/year) registration, with each providing different benefits. The contract also required vendors to pay a one percent fee on the value of any goods or services ordered through eVA, capped at \$500 per order. Agencies and institutions of higher education did not pay AMS or the Commonwealth for the use of eVA.

This funding model also provided for revenue sharing between AMS and the Commonwealth, with AMS initially receiving the largest share to pay for its investment. As revenue increased and AMS recovered its investment, the Commonwealth would receive increasingly greater revenue.



The contract provided the following minimum guarantees to AMS:

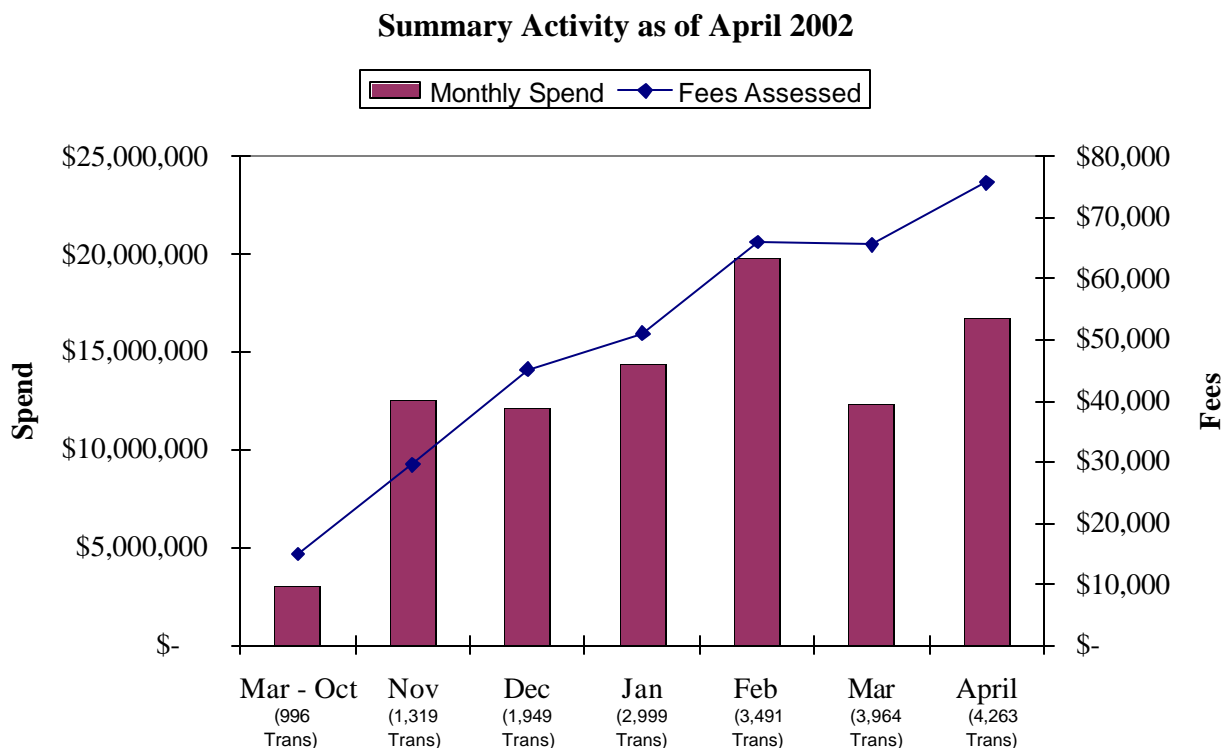
<u>Period</u>	<u>Amount</u>
2/15/01 – 6/30/02 (16 months)	\$ 910,000
7/1/02 – 6/30/03	2,150,000
7/1/03 – 6/30/04	2,990,000
7/1/04 – 6/30/05	4,250,000
7/1/05 – 6/30/06	<u>4,670,000</u>
TOTAL	<u>\$ 14,970,000</u>

General Services along with the Secretary of Finance calculated the minimum revenue guarantees based on projected annual purchasing activity and spending patterns, considering both the number and dollar value of transactions. General Services projected first period purchasing activity at \$105 million, resulting in the \$910,000 minimum revenue guarantee seen above.

The contract provided that if the actual vendor fee revenue did not reach the minimum revenue guarantee level in any given period, the Commonwealth would pay AMS the difference. Thus, because the number and value of orders processed through eVA drove this funding model, General Services and AMS needed to expedite the system's release so that immediate agency participation and use of eVA to the fullest extent possible could occur.

## System Usage

The following schedule reflects the activity processed through eVA from inception through April 2002, both in dollars and transactions, as well as in the associated vendor fees.



Although on track to meet the \$105 million projected purchasing activity used to calculate the first period minimum revenue guarantee, our analysis shows that agencies are not actively using eVA, impairing the Commonwealth's ability to meet its contractual obligations to AMS. For example, in April 2002 the eVA transaction levels were about \$16.7 million, which represents only 2.09 percent of the average monthly transactions for all participating agencies.

In addition, agencies have processed mainly high dollar transactions reducing the related vendor fees due to the \$500 cap. For example, State Police purchased fleet vehicles totaling \$5 million in a single transaction, increasing purchasing activity, but resulting in only \$500 in vendor fees. If agencies continue to use eVA in the current manner, we estimate assessed vendor fees of \$490,000 by June 30, 2002, \$420,000 short of the first years' revenue guarantee of \$910,000.

## 2002 Legislative Changes to the Funding Model

In the fall of 2001, vendors approached their legislators with concerns over using eVA. As a result, the 2002 legislative session proposed budget language requiring state agencies, rather than vendors, to initially pay for eVA. During the 2002 veto session, Governor Warner amended the budget allowing General Services to charge agencies and institutions \$7.1 million in fees for fiscal year 2003. The amendment also provides that if agencies fail to use eVA to the maximum extent practical, they may incur a non-participation fee in fiscal year 2004. Agencies did not include either of these costs in their budget plans; thus, the change

in the funding model represents an unanticipated funding mandate for them. General Services intends to resume charging vendors with transaction fees in fiscal year 2004.

The budget instructs General Services to explore alternative financing strategies for eVA, including assessing fees to state agencies. In addition, Governor Warner increased General Services' existing treasury loan from \$3 million to \$8 million, with repayment over a 10-year period beginning in 2006. So far General Services has requested and used \$2 million of this treasury loan.

On April 17, 2002, the General Assembly approved the final 2002 – 2004 Budget including all of these amendments.

#### Amended AMS Contract

General Services is re-negotiating the contract with AMS. While General Services does not plan to increase the total guarantees, they may agree to accelerate payments to AMS due to the availability of the \$7.1 million provided by the Appropriations Act. Further, General Services anticipates changes to the original delivery dates and enhancements to eVA functionality. Finally, General Services is negotiating additional requirements beyond the original eVA contract that will cost approximately \$1 million in fiscal year 2003. General Services anticipates that out of scope requirements will cost an average of \$1 million for each year remaining in the contract.

General Services has revised the projected eVA purchasing activity. The revisions anticipate agencies placing orders totaling \$700 million through eVA in fiscal year 2003. This is a significant spending increase from the \$105 million expected for fiscal year 2002. General Services recognizes that if agencies do not spend at levels sufficient to generate vendor fee revenue exceeding the minimum guarantees of \$14.7 million over 5 years, AMS may determine that its not financially advantageous to extend the contract. To realize this level of activity will require full participation by all state entities.

#### Anticipated Costs of the System

At a statewide level the potential costs of eVA over the next five years are as follows:

AMS contract guarantees	\$ 14,970,000
Treasury Loan	8,000,000
Out of Scope additions	<u>4,000,000</u>
Total	<u>\$ 26,970,000</u>

The above costs do not include agency technical and operational resources needed to make eVA work. We contacted General Services and several agencies to quantify these costs and determine their impact. We were interested in identifying personnel, hardware and software costs associated with the implementation of eVA at the agency level. To date, neither General Services nor the agencies have performed such an analysis; therefore, at this time, we cannot estimate the total cost to implement eVA or long-term savings that the implementation may realize. We expected that someone would have performed this type of analysis when determining whether the expected savings of eVA exceeded the cost of its implementation.

While we could not quantify these costs for an individual agency, below is a list of the actual and potential expenses we expect agencies to incur:

- Fiscal year 2003 agency share of \$7.1 million appropriation to eVA;
- Fiscal year 2004 charge for agencies not maximizing their use of eVA;
- Agency share of treasury loan repayment of \$8 million, plus interest;
- Technical resources to support agency system communication with eVA; and
- Administrative costs, including staff training, to implement and use eVA.

### Areas Needing Attention

eVA usage remains low and in order for vendor fees to sustain the system in the future, General Services must increase agencies' use of the system. There are three main areas where General Services must concentrate efforts to increase agency participation. These include creating an interface for agencies having decentralized systems, resolving the entry of small purchase charge card procurements, and improving vendor attitudes and the vendor registration process.

### *Development of an Interface*

One major barrier to eVA usage is that agencies with independent financial systems cannot directly communicate with eVA. These systems already allow agencies to manage procurement activities from initial request to final payment, fully integrating key internal controls such as encumbrances and authorizations in an automated process.

These agencies, such as the Departments of Transportation, Motor Vehicles, Social Services, and most institutions of higher education, purchase seventy-five percent of the goods and services that could go through eVA, totaling \$6.4 billion annually. Therefore, their purchases would generate a significant portion of the vendor fee revenues to pay the minimum contract guarantees.

Currently to participate, agencies with independent financial systems have two options: 1) only use eVA, eliminating benefits realized from their own systems functionality, or 2) enter information in both their system and in eVA, creating clerical inefficiencies and increasing the risk of inaccuracies as well as duplicate orders and payments. Therefore, most of these agencies have made a business decision to temporarily limit their use of eVA, such as only purchasing limited commodity types through the system. This decision has resulted in only 1.06 percent of their potential April 2002 purchases going through eVA.

As discussed previously, General Services does not intend for eVA to replace agency independent accounting systems, but rather to supplement these systems. Allowing agencies to continue to originate purchases, process approvals, and perform budget checks in their system, but then place the actual vendor order through eVA, requires interfaces between the two systems. According to AMS, Virginia is their only customer attempting to interface multiple independent financial systems to their eVA equivalent. AMS describes that their other customers are using their eVA equivalent as a centralized procurement system with all purchases originating in the system.

To facilitate the continued use of independent accounting systems and transfer information to eVA, General Services included the requirement for interfaces in the RFP for eVA. The contract with AMS specifies 15 standard interfaces that AMS must provide.

To address the most critical interfaces supporting electronic ordering, General Services began meeting weekly with agency representatives in November 2001 to define, develop, and implement an interface solution between their systems and eVA. AMS provided this work group with the standard information necessary to have their system communicate with eVA; however, some independent systems do not capture the required information and the agencies will need to change their process. In addition, some agencies' independent systems capture nationally recognized codes, such as commodity codes, in a format other than that used by eVA and it must be translated into the eVA format. We attend the weekly interface meetings and believe that successful interface will be difficult and costly to achieve, much as the Task Force Report recognized early on. To date, the work group has identified a minimum of nine key pieces of information that the agencies must agree to or set standards for, to support the interface. These include items such as vendor, commodity, and location identifiers.

General Services expects to release six interfaces supporting electronic ordering and receiving in August 2002. However, they have expressed concerns as to whether the project team can actually meet this date because of the need to resolve a number of outstanding information issues. For example, General Services has not finalized the pilot agencies, created a sample file for transfer testing, prepared tables to translate data into eVA formats, tested the transfer process, or performed stress tests. Stress testing is critical to ensure that the interface process and error resolution procedures can support the anticipated transaction volume.

The interface work group has selected a software solution to help facilitate the interface, but the software alone will not resolve the interface issues. The software and the independent systems will require additional programming and ongoing maintenance resources to communicate with eVA. Further, agencies will need to identify the resources needed to facilitate interface administration, reconciliation, and error handling.

Finally, we believe that General Services will eventually require the use of other eVA functionalities, such as quick quote and reverse auctioning. We believe the agencies need to address additional technical issues to support the interface of these future functionalities. General Services and AMS must communicate future technical requirements and mandatory functionalities to these agencies as soon as possible so they can begin planning for the increased resource requirements.

### ***Small Purchase Charge Card (p-card) Purchases***

General Services and the Department of Accounts created the p-card program in 1996 to decrease paper processing and administrative costs. Agencies issue p-cards to their employees with varying dollar limits to make purchases at local retail outlets or to pay for purchases rather than having the vendor invoice the agency. In fiscal year 2001, agencies made over 600,000 transactions using p-cards with a value of over \$131 million.

General Services requires agencies to process all p-card purchases through eVA, except those made at local retail outlets. However, General Services will not allow the transfer of p-card transactions from agency independent financial systems to eVA through the ordering interface for security reasons. Instead, agencies that track p-card information in their independent financial systems will need to either solely use eVA or key all p-card information into both systems. Either option creates inefficiencies for these agencies by impacting budgetary controls or requiring duplicate efforts.

General Services should consider eliminating the requirement to make p-card purchases through eVA for agencies that track them in their independent financial system. However, if having these purchases made through eVA is vital, then General Services should work with these agencies to create an interface solution accommodating them.

### ***Vendor Relations and Registration***

An additional issue affecting agency use of eVA is the unavailability of vendors or goods. Vendors have been slow to register on eVA because they do not want to pay the one percent fee for accepting eVA orders, decreasing their profit margin. Because of the funding model changes, vendors will not pay this fee in fiscal year 2003. However, General Services anticipates financing eVA with vendor fees beginning in fiscal year 2004. General Services should use this year to promote vendor participation by continuing to describe how the benefits of using eVA outweigh the costs. Agencies will not recognize more competition and less costly goods and services without full vendor participation.

Further, many vendors have found the on-line eVA registration process to be complex, often resulting in improper registration. This process has made it difficult for agencies to locate some vendors or find specific products using the eVA search feature. General Services recognizes they must improve this process and is working with AMS to negotiate a solution. In the interim, General Services has established vendor support lines to assist in the registration process. Addressing this concern will improve vendor participation and ensure that eVA captures accurate and complete vendor and product information.



# COMMONWEALTH of VIRGINIA

## *Department of General Services*

D. B. Smit  
Director

June 4, 2002

202 North Ninth Street  
Suite 209  
Richmond, Virginia 23219-3402  
Voice/TDD (804) 786-6152  
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Mr. Walt Kucharski  
Auditor of Public Accounts  
James Monroe Building  
101 N. 14<sup>th</sup> Street  
Richmond, Virginia 23219

Dear Walt:

Karen Helderman asked that I send you a cover letter and comments on your draft report on the Commonwealth's electronic procurement solution, eVA. My understanding is that you will publish this letter and our concerns with your report. Thank you for this opportunity.

We provided a good deal of support to APA in completing your review. I believe we accommodated your staff for every requested meeting and all requested information. I believe that your staff and mine worked well together and your auditors contributed to eVA implementation through their suggestions and observations. I regret that I must respectfully disagree with your report and am forwarding these concerns.

I will just outline my concerns and you can read the attachment for more detail.

- In an earlier draft of your report you mention that the Commonwealth has spent \$356 million in Enterprise Resource Planning (ERP) systems during the past five years. This reference was deleted in the latest draft. I think this number shows the magnitude of investment made by relatively few (albeit large) State agencies. The number indicated what is at stake and served to show that relatively modest sum (approximately \$24 million over five years) we will spend on eVA may be more cost effective considering there are 116 other agencies without ERP systems. I respectfully ask that you reconsider and include the reference to what the Commonwealth has spent on ERP systems as you had in your previous draft.
- Your report implies that eVA is intended to replace agency ERP systems. To the contrary, our implementation plan recognizes the large investment made in these systems. Therefore our designs call for eVA having interface with these ERPs, not replacing them. We do, however, present an alternative for agencies contemplating the purchase of an ERP.
- Your report states that agencies are not using eVA. In the past seven months, Virginia agencies and institutions of higher education have placed over 23,000 orders for more than \$121 million in goods and services through eVA. You may argue that this total represents a small percentage of goods purchased; however our target was to reach \$105 million in

“spend” by June 30, 2002. We surpassed the target in May 2002. Virginia agencies are using eVA and usage is growing.

- The report traces the inception of eVA to Governor Gilmore’s Procurement Assessment Task Force and the report states that General Services has created a project that goes beyond what the Task Force envisioned. The Department of General Services initiated the Commonwealth's eVA Project in November 1998, prior to the Gilmore Task Force. General Services began the development of eVA with the assistance and support of a design team of representatives from agencies, institutions of higher education, and local government. The Task Force endorsed many of the concepts in the eVA project and included comments in their report that DGS should continue to develop a full e procurement solution that would process all levels of procurements. Governor Warner and the General Assembly have endorsed this approach.

You may not appreciate why I feel so strongly about these four points. However, these four points illustrate important principles behind eVA. First, eVA will save the Commonwealth money. Second, it was developed by a broad spectrum of stakeholders and endorsed by the collective State leadership. Third it will work with other systems, not replace them (but it does offer a lower cost alternative to agencies that do not yet have a procurement system). Finally, agencies are using eVA. Admittedly implementation is a struggle, but agencies are using eVA.

Again, thank you for the opportunity to list my concerns in you report. Notwithstanding our disagreement on this present issue, I look forward to working with you in the future.

Sincerely

A handwritten signature in black ink, appearing to be 'D.B.' followed by a stylized 'S'.

D. B. Smit

Attachment



## **DGS Comments on APA Report**

**Following are comments that respond to specific areas of the APA draft eVA report**

### **Introduction and Background**

*APA Statements in Italics:*

*"The Code of Virginia designates General Services' Division of Purchases and Supply (DPS) with responsibility for establishing and administering statewide purchasing rules and regulations for materials, equipment, supplies, printing, and non-professional services based on the VPPA, as well as monitoring compliance with those requirements."*

DGS Response:

- In the interest of full information: Effective July 1, 2002, the Department of Information Technology assumes the authority for all policy, procedures, review and procurements of information technology goods and services. Also, the decentralized schools have their own higher education and small purchasing manuals.

### **Development of Decentralized Systems**

*APA Statements in Italics:*

*"Colleges and universities have always operated independent accounting systems.....The prominent vendors for these systems in the Commonwealth are Peoplesoft and Oracle and all include a procurement module that modernizes and automates much of the procurement process."*

DGS Response:

- ERPs such as Oracle and Peoplesoft have purchasing modules. Unfortunately these purchasing modules have limited functions and may only support selected vendors and contracts. The modules do not modernize the entire procurement process. It is likely that they do not support solicitation development, evaluation, and award.
- It is expensive to build these independent, customized purchasing systems and fund the required support. Generally annual support and maintenance costs are 20-30% of the current market value of the software. Some upgrades cost millions of dollars.
- The Commonwealth spends approximately \$5 billion annually for goods and services, but as a whole there is no enterprise-wide information on the volume and prices of goods and services bought. This prevents the Commonwealth from leveraging its buying power to reduce the cost of goods and services. eVA will provide this visibility by implementing, among other functionality, a data warehouse.

*"As shown in our report, "Review of Financial Systems Implementation" dated November 28, 2001, within the last five years many state agencies and institutions of higher education have replaced or implemented independent financial accounting systems. We have identified approximately 35 agencies having independent financial systems and less than five additional agencies currently considering implementing a system or upgrading their existing system. The majority of the remaining CARS user agencies will **never** require functionality beyond what CARS provides and therefore may **never** attempt to implement an independent financial or purchasing system.*

DGS Response:

- A DPS survey indicates that of the 182 agencies and institutions, 66 report having an Enterprise Resource Planning System (ERP) or some version of a system. According to APA, within the last five years the largest state agencies and institutions have spent or have budgeted to spend in excess of \$356 million to replace or implement independent ERPs. Agency procurement professionals without access to an ERP are requesting automated procurement tools. They are limited by available funds. As funding becomes available, a number of the 116 agencies and institutions without ERPs will begin to plan or implement independent ERPs. One university is spending approximately \$23 million to implement an ERP and one agency may have to upgrade their ERP at a cost of approximately \$25 million.

## **The Governor's Task Force**

*APA Statements in Italics:*

*"In February 2000 the Task Force released a report on their recommendations to improve Virginia government's procurement systems. Their report recognized that creating one centralized procurement system would most likely improve competition since vendors would not have to separately contact each agency to bid on goods and services. However, the Task Force reported that centralizing a procurement system would be a complex project and that many agencies already have automated procurement systems in place. Their specific recommendations included, but were not limited to:*

- ✓ requiring all state agency solicitations over \$30,000 to be available from one website, using a uniform format;
- ✓ centralizing, enhancing, and requiring vendor registration on the website;
- ✓ targeting July 2002 as the date for full implementation of front-end electronic procurement, i.e. the central website.

DGS Response:

- DPS recognized and agreed with the Task Force Report that centralizing a procurement system would be a complex project and that many agencies already have automated procurement systems in place. The current e Procurement (eVA) vision was not to replace the existing ERP systems' procurement modules in which agencies and universities had made an investment. eVA

is intended to supplement these ERPs by becoming the one "internet portal" or connection that would allow the ERPs to do business with vendors electronically, one way. eVA would also provide ERPs with a single web site for vendor registration and maintenance of registration data, single web site for posting business opportunities, vendor source information, and a central data warehouse that would capture all agencies' and institutions' purchasing information to allow individual agencies and the Commonwealth to leverage its buying power.

- The Task Force report provides other recommendations to improve Virginia procurement. The report states:
  - ✓ "This past April, DPS launched its E-Procurement web site for goods and services. The current vision, one the Task Force will recommend be enhanced, contemplates the following capability:
    - Vendor registration database
    - Advertising of statewide goods and services contracts
    - Buying capability for goods and services (shopping cart approach)
    - Information repository for various items such as the VPPA, and other manuals."
  - ✓ "E-Procurement has essentially three components covering the following areas:
    - Advertising, Receiving Bids and Proposals: This phase typically involves advertising bids via a web site, registering vendors in order to send them information, and receiving proposals electronically.
    - On-Line Ordering: This phase generally applies to agency ordering goods via a web connection from government contracts that are already in place.
    - Vendor Payments: This final phase normally involves such things as electronic purchase orders, invoices, and payment."
- The Task Force Report states, "In each area, there is ample evidence of savings emerging across the country.....On-line ordering and vendor payment systems are cutting internal processing costs or the cost of "doing business" significantly."

## **Functionality of the System**

*APA Statements in Italics:*

*"Under the contract, AMS functions as the application service provider that makes eVA available to the Commonwealth and customizes the system as General Services requests. Under this arrangement the Commonwealth does not physically own the eVA system or have significant rights beyond being a user of eVA."*

DGS Response:

- Contracting with a third party to provide a service such as electronic procurement is the most cost-effective approach and is an accepted approach in the private sector and the federal government. When the public sector performs this service the results are building an expensive infrastructure of staffing and equipment costing millions of dollars. The staffing is expensive and

the public sector has difficulty in keeping up with the latest technological changes in equipment.

- An assessment done of statewide technology capabilities determined that DIT was not ready to support a project of this magnitude.

*"Finally, General Services believes eVA will provide agencies with more choices and less costly goods. We have obtained no evidence or studies to show that state governments realize better prices using an electronic procurement system. General Services has provided information that suggests major private companies, such as IBM and the federal government, have realized savings as a result of electronic ordering and invoicing. However, eVA does not currently provide on-line invoicing capabilities, decreasing the efficiencies that could be realized by this benefit. In addition, major private companies tend to have a limited number of partnership agreements, whereas the Commonwealth looks to maximize competition with the most vendors possible. These distinct differences make it difficult to compare the Commonwealth to other industries and predict the savings."*

DGS Response:

- Electronic invoicing is included in the AMS contract and is to be implemented. eVA is a project that is in development and implementation, so a statement like "does not currently provide on-line invoicing" should not be interpreted to mean eVA will not include on-line invoicing.
- Governor Gilmore's Procurement Assessment Task Force Report states, "In each area, there is ample evidence of savings emerging across the country.....On-line ordering and vendor payment systems are cutting internal processing costs or the cost of "doing business" significantly."
- Texas conducted a study to compare what governments and private industry spent on procurement. While the private sector spent only 1 percent of its procurement budget on processing the purchases, governments spent 5.5 percent to accomplish the same result. Implementing electronic procurement has the potential for significant savings.
- The National Association of Purchasing Management research indicates the costs to handle a single paper-based purchase order at \$120 to \$150, while 80 percent of all purchases are for items that cost less than \$500.
- Both the public and private sectors are rapidly moving to implement electronic procurement. There are numerous examples of these implementations and savings in reduced purchasing costs and cycle time on the Internet.
- The private sector examples of electronic procurement can be used and have been by the Federal and Department of Defense public sectors to benchmark the potential savings from electronic procurement. The same is true for the states.

▪ **System Usage**

*APA Statements in Italics:*

*"The following schedule reflects the activity processed through eVA from inception through May 2002, both in dollars and transactions, as well as associated vendor fees."*

DGS Response:

<b>eVA Spend - Monthly and Cumulative Data</b>				
<b>Month</b>	<b>Transactions</b>	<b>Monthly Spend</b>	<b>Cumulative Transactions</b>	<b>Cumulative Spend</b>
March 2001	8	\$431	8	\$ 431
April 2001	18	\$34,489	26	\$ 34,920
May 2001	25	\$60,407	51	\$ 95,327
June 2001	78	\$ 231,759	129	\$ 327,087
July 2001	63	\$ 121,087	192	\$ 448,174
August 2001	225	\$ 571,023	417	\$ 1,019,197
September 2001	142	\$ 193,394	559	\$ 1,212,590
October 2001	437	\$ 1,828,900	996	\$ 3,041,491
November 2001	1,319	\$ 12,546,949	2,315	\$ 15,588,440
December 2001	1,949	\$ 12,117,347	4,264	\$ 27,705,787
January 2002	2,999	\$ 14,393,306	7,263	\$ 42,099,093
February 2002	3,491	\$ 19,852,021	10,754	\$ 61,951,115
March 2002	3,964	\$ 12,362,298	14,718	\$ 74,313,413
April 2002	4,263	\$ 16,698,080	18,981	\$ 91,011,493
May 2002	4,591	\$ 30,098,971	23,572	\$ 121,108,465
<i>Totals:</i>	<i>23,572</i>	<i>\$ 121,108,465</i>		

*"Although on track to meet the \$105 million projected purchasing activity used to calculate the first period minimum revenue guarantee, our analysis shows that agencies are not actively using eVA, impairing the Commonwealth's ability to meet its contractual obligations to AMS. For example, in March 2002 the eVA transaction levels were about \$12.4 million, which represents only 1.70 percent of the average monthly transactions for all participating agencies."*

*In addition, agencies have processed mainly high dollar transactions reducing the related vendor fees due to the \$500 cap. For example, State Police purchased fleet vehicles totaling \$5 million in a single transaction, increasing purchasing activity, but resulting in only \$500 in vendor fees. If agencies continue to use eVA in the current manner, we estimate assessed vendor fees of \$460,00 by June 30, 2002, \$450,000 short of the first years' revenue guarantee of \$910,000."*

DGS Response:

- Over 23,000 orders and \$121 million through eVA in seven months does not support the APA statement that agencies are not using eVA. Further, almost \$400,000 in fees have been invoiced and, along with the order numbers, indicates that there are a significant number of small dollar value orders being processed through the solution.
- A reverse funding model was the first of its kind and adjustments to the model were anticipated as more experience is obtained.
- It takes 3-5 years for a project of this type to begin to show a return on investment. That is why DGS took out a treasury loan to support implementing the project until it became self-supporting.
- Interfaces with ERPs is a critical functionality and is in the process of being implemented. When interfaces are completed the transactions and dollar value in eVA will increase even more than the current rapid rate.

## **2002 Legislative Changes to the Funding Model**

*APA Statements in Italics:*

*"In the fall of 2001, vendors approached their legislators with concerns over using eVA. As a result, the 2002 legislative session proposed budget language requiring state agencies, rather than vendors, to initially pay for eVA. During the 2002 veto session, Governor Warner amended the budget allowing General Services to charge agencies and institutions \$7.1 million in fees for fiscal year 2003. The amendment also provides that if agencies fail to use eVA to the maximum extent practical, they may incur a non-participation fee in fiscal year 2004. Agencies did not include either of these costs in their budget plans; thus, the change in the funding model represents an unanticipated funding mandate for them. General Services intends to resume charging vendors with transaction fees in fiscal year 2004."*

DGS Response:

- The majority of responses from vendors have been very positive. Over 5,300 vendors have registered on eVA. Only one known vendor association has been vocal in opposition to electronic procurement. This group expressed concern that electronic procurement may cause members to lower prices. The group wants to raise their prices.
- "Non participation fee" language was included in the Appropriation Act in the same manner as the Purchase Card Program, when language stipulated agencies would incur fees if they did not use the purchase card for small dollar purchases. These penalties were not assessed but the language was effective leverage.

## Anticipated Costs of the System

*APA Statements in Italics:*

*"At a statewide level the minimum anticipated costs of eVA over the next five years are as follows:*

<i>AMS contract guarantees</i>	<i>\$14,970,000</i>
<i>Treasury Loan</i>	<i>8,000,000</i>
<i>Out of Scope additions</i>	<i><u>4,000,000</u></i>
<i>Total</i>	<i>\$26,970,000</i>
	<i>=====</i>

DGS Response:

- The above numbers are incorrect. Any monies from the treasury loan paid to AMS offset the guarantee amounts. Further, the \$1 million budgeted per year for additional changes to eVA is only a contingency and may not be used. Only \$1.08 million in enhancements have been awarded to AMS this year. Therefore, the \$26,970,000 number is really \$16,050,000 which will be paid back by the Commonwealth's share of the eVA revenue fees.
- The table should reflect the following:

AMS contract guarantees	\$14,970,000
Out of Scope additions	<u>1,080,000</u>
Total	\$16,050,000
	=====

*"The above costs do not include agency technical and operational resources needed to make eVA work. We contacted General Services and several agencies to quantify these costs and determine their impact. We were interested in identifying personnel, hardware and software costs associated with the implementation of eVA at the agency level. To date, neither General Services nor the agencies have performed such an analysis, therefore, at this time we cannot estimate the total cost to implement eVA or long-term savings that the implementation may realize. We expected that someone would have performed this type of analysis when determining whether the expected savings of eVA exceeded the cost of implementation."*

*"While we could not quantify these costs for an individual agency, below is a list of the potential expenses we expect agencies to incur:*

- ✓ *Fiscal year 2003 agency share of \$7.1 million appropriation to eVA*
- ✓ *Fiscal year 2004 charge for agencies not maximizing their use of eVA*
- ✓ *Agency share of treasury loan repayment of \$8 million, plus interest*
- ✓ *Technical resources to support agency system communication with eVA*
- ✓ *Administrative costs, including staff training, to implement and use eVA*

DGS Response:

- Such an analysis was done. eVA is a service offering provided by AMS to Virginia agencies, institutions, and local governments and as such agencies should not see an increase in staff. The only requirement is a PC, browser, and Internet connection. The service offering does require access to the Internet. Use of the Internet to conduct government business is a strategic initiative of the last and current administration. eVA fully complies with this technology direction. (Executive Orders 00-51, 00-65).
- For agencies that have chosen to implement independent accounting systems and choose to interface those systems with eVA, the technical support requirement once the interface is written is minimal. These agencies already require interfaces with internal systems and external state systems such as CARS. Data exchange with eVA has been designed to maximize automated data exchange.
- The agencies share of the \$8 million loan repayment would be contributed by the \$7.1 million appropriated to eVA in 2003. They would not have to pay both.
- By 2004 most agencies should be using eVA and it is doubtful any charge for not maximizing eVA would be collected. Just like the implementation of the AMEX Purchase Card Program, this language will probably never be used.

### **Areas Needing Attention**

*APA Statements in Italics:*

*"eVA usage remains low and in order for vendor fees to sustain the system in the future, General Services must increase agencies' use of the system. There are three main areas where General Services must concentrate efforts to increase agency participation. These include creating an interface for agencies having decentralized systems, resolving the entry of small purchase charge card procurements, and improving vendor attitudes and the vendor registration process."*

DGS Response:

- Over 23,000 orders and \$121 million in seven months is not low usage and leads the states with the possible exception of one other state.
- **Creating an interface for agencies having decentralized systems.** This has been addressed several times in other sections of this report.
- **Resolving the entry of small purchase charge card procurements.** During implementation no agency informed DGS that they required users to submit purchase card transactions to their local systems prior to using the card for a purchase. Two agencies on the interface workgroup do attempt to encumber purchase card transactions by having the user enter a purchase card order document into their financial system. These documents are not ordering documents. Some agencies have automated the record keeping of purchase card transactions, but this is an after the



purchase transaction. eVA interfaces support both requirements.

For agencies that require encumbrance of the purchase card transaction, they have the option of entering the purchase requisition into their local system and importing the requisition into eVA for final processing. This processing within eVA would include selection of the purchase card number and an approval by the purchase cardholder of the order before it is transmitted to the vendor. It would not require reentry of the ordering details.

The export order file identifies purchase card transactions and all associated accounting. This file can be used by agencies to load purchase card transaction data into their local systems for reconciliation. eVA also provides reports that can be loaded into spreadsheets to assist purchase cardholders with purchase card reconciliation and cost accounting for their transactions.

- **Improving vendor attitudes and the vendor registration process.** The majority of responses from vendors have been very positive. Over 5,300 vendors have registered on eVA

## **Development of an Interface**

*APA Statements in Italics:*

*"One major barrier to eVA usage is that agencies with independent financial system cannot directly communicate with eVA. These systems already allow agencies to manage procurement activities from initial request to final payment, fully integrating key internal controls such as encumbrances and authorizations in an automated process."*

DGS Response:

- The Commonwealth, with a design team from agencies and universities, has developed interface specifications, which will be implemented using a "message broker" between the ERPs and eVA to seamlessly transfer purchasing data. This tool is currently being implemented.
- eVA does not replace these ERP systems and their functionality, or interfere with their internal controls. Instead, eVA provides additional functionality to these solutions.
- These agency and university ERPs, such as Oracle and Peoplesoft, have purchasing modules. Unfortunately these purchasing modules can only support selected vendors and contracts. Few, if any, support solicitation development, evaluation, and award. Yet, it is expensive to build these independent, customized purchasing systems and fund the required support. Generally annual support and maintenance costs are 20-30% of the current market value of the software. Some upgrades cost in the millions of dollars.
- Often these ERPs maintain duplicate information for vendors' registrations and vendors' catalogs. Some ERPs provide functionality to post purchasing solicitations, bid results, award notices, and contract information to the Internet. Data storage and associated maintenance is costly, and even more so when agencies maintain redundant systems and store the same data multiple times.

*"Currently to participate, agencies with independent financial systems have two options: 1) only use eVA eliminating benefits realized from their own systems functionality, or 2) enter information in both their system and in eVA, creating clerical inefficiencies and increasing the risk of inaccuracies as well as duplicate orders and payments. Therefore, most of these agencies have made a decision to temporarily limit their use of eVA, such as only purchasing limited commodity types through the system."*

DGS Response:

- The Commonwealth will implement a "message broker" by August 1, 2002, as part of the contract that will allow agencies with ERPs to import and export data to eVA. This allows these agencies to use the functionality of their ERPs, but send orders electronically to vendors through eVA.
- Agencies, such as DMV and VDH, are placing all procurements through eVA that are capable of being processed through eVA. eVA is still being implemented and some agencies are taking a more graduated approach to eVA implementation by processing one commodity at a time. Either approach is resulting in the growing use of eVA in dollars and transactions.

*"As discussed previously.....Allowing agencies to continue to originate purchases, process approvals, and perform budget checks in their system, but then place the actual vendor order through eVA, requires interfaces between the two systems. According to AMS, Virginia is the only customer attempting to interface multiple independent financial systems to their eVA equivalent. AMS describes that their other customers are using their eVA equivalent as a centralized procurement system with all purchases originating in the system."*

DGS Response:

- AMS has two other e-procurement contracts, Arizona State University and Washington State. Washington did a pilot project, and AMS anticipates using the Virginia approach for Arizona State. Texas has reviewed Virginia's project and anticipates using the same approach for their e-procurement implementation.
- Virginia, for a variety of reasons, has chosen not to consolidate its use of technology nor share common applications across agencies and institutions. Some say this provides flexibility and innovation others argue that it is a waste of taxpayer dollars. This argument is not new and Virginia is not alone in this approach. Agencies that choose to implement independent systems understand that they have a responsibility to interface with central (aggregating systems) when these central systems are developed or modified. To reduce the impact of Virginia's disparate systems on eVA, the project team worked with the Secretary of Technology to design a technology service, commonly called a "message broker". Message broker is like a switchboard operator that allows different systems to connect to eVA. From AMS' perspective it will appear that Virginia has one system.

*".....However, some independent systems do not capture the required information and the agencies will need to change their process. In addition, some agencies' independent systems capture*

*nationally recognized codes, such as commodity codes, in a format other than that used by eVA and it must be translated into the eVA format."*

DGS Response:

- Virginia has a critical need to know what it purchases, how much it costs, and who Virginia does business with. To conduct meaningful analysis, all Virginia purchases must be classified using one standard classification system. To combine data from disparate sources requires defining classification standards. Most agencies do not attempt to classify purchases. For the few that do have classifications, the version used is obsolete and no longer supported by the originating national organization. Therefore, they really no longer have nationally recognized classifications.
- For agencies that have never attempted to classify purchases, internal processes must change to accommodate capturing this information.

*"We attend weekly interface meetings and believe that successful interface will be difficult and costly to achieve, much as the Task Force recognized early on."*

DGS Response:

- The Task Force did not recognize that successful interface would be difficult and costly to achieve. The Task Force Report said, "An approach toward total centralization of all or part of each function would clearly be expensive with and without less clear benefits. Likewise, failure to centralize some portion would dilute the potential advantage that E-Procurement has to offer." Interface is that in between approach that meets the intent of the Task Force Report.
- Interface with agencies' ERP systems and ability to pass information from one system to another is something that is needed by the Commonwealth and not just for eVA. Therefore, there is an investment beyond eVA that the Commonwealth already has in planning.
- eVA is not implementing one single centralized procurement system but tying together a number of individual systems into a virtual enterprise-wide solution through the flexibility and cost effective use of the internet. eVA does not replace the existing investments agencies have made in Enterprise Resource Planning Systems.
- *"General Services expects to release six interfaces supporting electronic ordering and receiving in August 2002. However, they have expressed concerns as to whether the project team can actually meet this date, because of the need to resolve a number of outstanding information issues. For example, General Services has not finalized the pilot agencies, created a sample file for transfer testing, prepared tables to translate data into eVA formats, tested the transfer process, or performed stress tests. Stress testing is critical to ensure that the interface process and error resolution procedures can support the anticipated transaction volume."*

DGS Response:

- APA states, “....they have expressed concern about the project team meeting the August 1 date.” Assuming “they” refers to DGS, we have never expressed concern about having the interface functionality implemented and in production by August 2002. DGS is concerned about how many agencies will be ready to provide the interface file to eVA. Although the agency work is technically straightforward there are key management decisions that each agency must make. The agency must incorporate the interface work into their application programming schedules.
- DGS has two agencies and one university participating in the pilot implementation in August. A sample file required by the agencies was developed on May 3 and the tables required to accommodate code translation were provided to pilot organizations on May 4. The project plan provides for testing and stress testing of the message broker to eVA interface. This is not a new requirement and can be accomplished within the current schedule.

Auditor Reply to General Services Response Dated June 4, 2002

We have reviewed the Department of General Services' response to our report on the Commonwealth's electronic procurement solution, eVA, dated June 4, 2002 and offer the following additional information.

The \$556 million referred by General Services represents the amount that entities have spent to implement independent financial systems during the last five years and comes directly from our report, "Review of Financial Systems Implementations" dated November 2001.

The independent financial systems discussed in that report represent comprehensive systems that address all major business processes. Although the \$556 million cited in that report shows the magnitude of the Commonwealth's recent investment in financial systems, the report's main focus was on the need for the Secretary of Information Technology to issue statewide information technology standards to provide guidance in systems development projects and to establish an information technology framework for Commonwealth entities. eVA represents another system developed without these information technology standards.

General Services' also states that we imply that eVA intends to replace ERP systems. We fully understand that eVA is only a procurement module. As such, eVA does not address the complete purchasing business cycle available in most ERP systems.

Finally, General Services' asserts that our report states that eVA goes beyond what Governor Gilmore's Procurement Task Force envisioned. While this statement was in an early draft of our eVA report, we later removed this statement and it was not in the final draft to which General Services is responding.