



ARLINGTON  
VIRGINIA

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# Internal Audit Report - Contract Compliance Cycle Audit

Department of Technology Services:

SHI International Corporation – Contract Number-  
582-14

Report Date: June 8, 2017

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## TRANSMITTAL LETTER

June 8, 2017

Mr. Jack Belcher  
Chief Information Officer, Department of Technology Services

Ms. Maria Meredith  
Deputy Director, Department of Management and Finance

Arlington County, Virginia  
2100 Clarendon Blvd  
Arlington, VA 22201

Pursuant to the contract and related statement of work for Arlington County, Virginia (“the County”), we hereby present the Contract Compliance Cycle Audit: Department of Technology Services (“DTS”) – SHI International Corporation (“SHI”). Our report is organized in the following sections:

<b>Executive Summary</b>	This section includes a background summary of the function, the objectives and approach, and a detailed description of the observations noted during this cycle audit. Identified with each observation is the recommended action(s), and management’s corrective action plan, including the responsible party and estimated completion date.
<b>Background</b>	This section provides an overview of the function within the process and pertinent operational control points and related compliance requirements.
<b>Objectives and Approach</b>	The cycle audit objectives and focus are expanded upon in this section as well as a review of the various phases of our approach.
<b>Process Maps</b>	This section illustrates process maps, which identifies data flow, key control points and any identified gaps.

As described in our objectives and procedures outlined on page 8 and 9 of this report, the observations noted are based on our analysis of the processes, documents, records and information provided to us by the County. This cycle audit focused on evaluating the soundness of internal control policies to safeguard assets and on reviewing compliance with County policies. We offer no assurances that schemes or fraudulent activities have not been, or are not currently being perpetrated by any person within the areas reviewed.

We would like to thank the staff and all those involved in assisting RSM US LLP in connection with this Contract Compliance Cycle Audit.

Respectfully Submitted,

*RSM US LLP*

**RSM US LLP**

## EXECUTIVE SUMMARY

### Background

Contract compliance monitoring is an integral piece of the County’s control environment. Contract compliance encompasses all contractual agreements entered into by the County. The focus of this cycle audit was vendor agreements. Although certain aspects of the purchasing function are centralized within the Department of Management and Finance (“DMF”), and vendor selection is performed in conjunction with Purchasing (for purchases greater than \$5,000), many of the high risk areas like contract compliance and monitoring are the responsibility of the individual departments / divisions / bureaus.

Effective January 1, 2017, the County implemented a Contract Administration Policy for all contracts, regardless of their procurement methodology or dollar value. The purpose was to define and implement a standard policy and process for the administration of contracts and define roles and responsibilities for County personnel that monitor and manage contractual relationships.

#### Contract Selection

The SHI International Corporation contract number 582-14 was selected for testing. Contract 582-14 is a rider agreement on the Virginia Information Technologies Agency contract with SHI International Corporation for Microsoft products and online services, including but not limited to licenses and software assurance, and to provide various reseller services. Microsoft products are to be licensed directly from Microsoft, and Microsoft shall be responsible for hosting Microsoft online services. The contract was issued January 21, 2014, expiring October 16, 2016, and may be renewed for three additional one-year periods. The current contract is effective under the Notice of Contract Renewal issued October 3, 2016, expiring October 16, 2017. The Project Officer for this contract is an appropriate employee within the Department of Technology Services (“DTS”).

Fieldwork was performed April 2017 through May 2017

We would like to thank all Arlington County team members who assisted us throughout this review.

### Objective and Scope

The scope of this cycle audit encompassed one contract from the Department of Technology Services; contract number 582-14 with SHI International Corporation. Although the County issued a specific Contract Administration Policy effective January 1, 2017, the audit period was January 1, 2016 to April 1, 2017. For transactions from January 1, 2016 to December 31, 2016, testing was limited to substantive procedures as it related to invoice accuracy, invoice compliance with contract terms, payment timeliness, and verification of goods and services. For transactions January 1, 2017 to April 1, 2017, procedures also included department compliance with aspects of the County issued contract compliance policies and procedures.

The objective of this cycle audit was to assess whether the system of internal controls is adequate and appropriate, for effective contract compliance, with selected provisions of the contract as it relates to payment.

A total of 76 invoices were submitted during our audit period. A sample of 15 invoices, or 20% of the population, were included in our detailed testing.

### Overall Summary / Highlights

The observations identified during our assessment are detailed within the pages that follow. We have assigned relative risk or value factors to each observation identified. Risk ratings are the evaluation of the severity of the concern and the potential impact on the operations of each item. There are many areas of risk to consider in determining the relative risk rating of an observation, including financial, operational, and/or compliance, as well as public perception or ‘brand’ risk.

#### Number of Observations by Risk Rating

(See Appendix A for rating definitions)

	High	Moderate	Low
Contract Compliance Cycle Audit – DTS – SHI International Corporation	-	-	2

## EXECUTIVE SUMMARY (CONTINUED)

<u>Risk Rating</u>	<u>Observation</u>	<u>Recommendation</u>	<u>Management's Action Plan</u>
<b>Low</b>	<b>1. Invoice Approval by Project Officer</b>		
	<p>Per the County Contract Administration Policy Section 4.0, the contract Project Officer must, at a minimum, be involved in <i>“review, approval, and/or payment of invoices”</i>. Policy Section 5.0 Part D further elaborates on the Project Officer’s role in the invoicing process, explaining that the Project Officer must verify that invoices comply with all contractual requirements and ensure charges are accurate.</p> <p>We noted the following:</p> <p>A number of departments initiate POs against the SHI 582-14 contract outside of DTS for Microsoft software and licenses. If another department initiates the PO, the invoice is not automatically routed through DTS and the DTS Project Officer may never obtain or review an invoice prior to payment. The County’s Contract Administration Policy requires Project Officer review of all contract invoices, which is not possible when invoicing is handled outside of DTS.</p> <p>Based on our testing of 15 invoices:</p> <ul style="list-style-type: none"> <li>• 9 were for purchases of software and licenses for departments outside of DTS. In 3 of the 9 non-DTS purchases tested, a PO was initiated by another department outside of DTS, and proper invoice approval was not maintained.</li> <li>• In 1 of these 3 instances, the date of invoice receipt was not recorded. Payment was made 32 days after the invoice date, which exceeds the contract and Contract Administration Policy payment deadline. Payment may have been made within 30 days of receipt, but without recording a receipt date we were unable to validate this.</li> </ul>	<p>The County Contract Administration Policy allows for a department to develop their own policy for contract administration which must be approved by the Purchasing Agent. We recommend that DTS request an exception to the policy for circumstances in which other departments procure items through a DTS contract and are capable of handling invoicing independently. This way, the DTS Project Officer would not be required to review and approve every invoice as the policy currently requires, which would minimize the burden on DTS staff.</p> <p>DTS Project Officer’s review of requisitions should continue, and be based on the appropriateness of the software / license requested for the County’s IT environment and the department’s needs. If the item is deemed appropriate, the requesting department may handle invoicing within their own department. They should mark invoice receipt date and document invoice review and approval, by signature and date, prior to payment, as required by County policy.</p>	<p><b>Response:</b> Currently, for DTS purchases against this contract, the DTS Project Officer reviews each requisition for appropriateness of use of this contract. It is verified that DTS supports the software and that the contract allows for the purchase. We also pay those invoices associated with the requisition. For non-DTS departments, we do the same except the department who creates the requisition is responsible for bill payment. Many other contracts around the County have a similar arrangement, except those requisitions are not reviewed by the Project Officer (office supplies, utility locating services, electrical work to name a few).</p> <p>DTS feels there is no risk here as each requisition is reviewed by the DTS Project Officer. The only risk to the County arises if someone from another department deliberately sets up a requisition for one software and purchases another, in direct violation of Purchasing policies. To remedy the situation, DTS will work with DMF to allow for an exception and let other departments pay their own invoices.</p> <p><b>Responsible Party:</b> DTS Finance Manager</p> <p><b>Estimated Completion Date:</b> September 1, 2017</p>

## EXECUTIVE SUMMARY (CONTINUED)

<u>Risk Rating</u>	<u>Observation</u>	<u>Recommendation</u>	<u>Management's Action Plan</u>
<b>Low</b>	<b>1. Invoice Approval by Project Officer - continued</b>		
	<p>When departments, besides DTS, handle invoicing for the SHI 582-14 contract, the contract's Project Officer does not review invoices and DTS has no oversight or ability to enforce the appropriate level of invoice review prior to payment. PRISM is configured to route all requisitions against the SHI 582-14 contract to the DTS Project Officer for approval. If a requisition or PO change occurs, the requisition must be re-approved by the DTS Project Officer. An invoice may not be processed without a corresponding requisition in the system.</p> <p>The Project Officer's review of all requisitions against the SHI 582-14 contract plays an integral role in supporting an effective internal control environment, because without an individual with the appropriate IT competence involved with the purchase and purchase review against the contract, the County is at risk that a department may purchase software or licenses from the SHI 582-14 contract that is not supported by the County's IT environment. Additionally, any internal controls and processes performed by DTS to manage the software and license inventory / environment may be ineffective or inaccurate, when performed by someone outside of DTS.</p>		

## EXECUTIVE SUMMARY (CONTINUED)

<u>Risk Rating</u>	<u>Observation</u>	<u>Recommendation</u>	<u>Management's Action Plan</u>
<b>Low</b>	<b>2. Insufficient Review of Mathematical Accuracy of Invoices</b>		
	<p>As part of the invoicing process for purchases made on the SHI International Corporation 582-14 contract, multiple individuals review the applicable invoice before it gets paid. The review is performed to validate that the invoice agrees to the correct product requested and the PO, and that the invoice is billed to the proper department.</p> <p>We noted that there is insufficient documented review of the mathematical accuracy of invoices for the SHI International Corporation 582-14 contract. Based on our testing of 15 invoices, the following was noted:</p> <ul style="list-style-type: none"> <li>• Per inquiry, discounts are not always recalculated upon review of invoices.</li> <li>• One invoice utilized a discount rate which was smaller than the discount rate agreed upon in the contract, resulting in an over-payment of \$8.45, on a total invoice amount of \$7,946.38.</li> </ul> <p>Without thorough review of the mathematical accuracy of invoices, the County risks paying more for goods/services than what was agreed upon in the contract terms.</p>	<p>We recommend that the DTS Project Officer perform a documented recalculation of the discount taken during his review of each requisition, and record the discount percentage within the supporting documentation in order to verify that discounts are in line with those agreed upon in the contract.</p>	<p><b>Response:</b> DTS accepts this finding and will work to manually review the discount taken on each invoice.</p> <p><b>Responsible Party:</b> DTS Finance Manager</p> <p><b>Estimated Completion Date:</b> September 1, 2017</p>

## BACKGROUND, OBJECTIVES AND APPROACH

### Background (continued)

#### Overview

Contract compliance encompasses all contractual agreements entered into by the County. Although certain aspects of the purchasing function are centralized within the Department of Management and Finance, and vendor selection is performed in conjunction with Purchasing, many of the high risk areas like contract administration, compliance and monitoring are the responsibility of the individual departments / divisions / bureaus. These monitoring responsibilities specifically include:

- Understanding the Scope of Work and Terms and Conditions of the contract;
- Management of contract billings to avoid cost overruns;
- Validation of complete and satisfactory performance of services;
- Ensuring timely performance of contracted services;
- Providing updates to the Department Director, Division Chief and Department of Management and Finance related to budget, as necessary;
- Maintaining appropriate documentation, in compliance with the County level document retention policy and respective contract; and
- Review and approval of invoices for payment to the vendor in line with the payment terms and conditions outlined in the agreement.

Effective January 1, 2017, the County implemented a Contract Administration Policy for all contracts, regardless of their procurement methodology or dollar value. The purpose was to define and implement a standard policy and process for the administration of contracts and define roles and responsibilities for County personnel that monitor and manage contractual relationships. Specifically, the policy establishes Project Officer and Task Officer responsibilities, defines internal controls surrounding contract payment, quality assurance and recordkeeping, and outlines all applicable regulations to which the contract administration process must adhere.

#### SHI International Corporation

Contract 582-14 is a rider agreement on the Virginia Information Technologies Agency contract with SHI International Corporation for Microsoft products and online services, including but not limited to licenses and software assurance, and to provide various reseller services. Microsoft products are to be licensed directly from Microsoft, and Microsoft shall be responsible for hosting Microsoft online services. The contract was issued January 21, 2014, expiring October 16, 2016, and may be renewed for three additional one-year periods. The current contract is effective under the Notice of Contract Renewal issued October 3, 2016, expiring October 16, 2017.

Contract 582-14					
Vendor	Contract Title	Execution Date	Total Dollars Spent on Contract <sup>1,2</sup>	Contract Type	County Division
SHI International Corporation	Microsoft Products & Services	January 21, 2014	\$4,082,674.37	Rider	DTS

<sup>1</sup>Since execution, as of April 1, 2017

<sup>2</sup>Total dollars spent during audit period (January 1, 2016 – April 1, 2017): \$1,322,540.81

#### Roles and Responsibilities

The following departments play key roles in the contract compliance process:

#### Department of Technology Services (“DTS”)

DTS is responsible for providing project management and oversight services during all phases of the contract. DTS is also responsible for completing all Project Officer functions as outlined in the contract, overall contract compliance, and reviewing and approving vendor invoices for accuracy prior to payment. This includes review and approval of vendor invoices for software / licenses requested by a department outside of DTS.



## BACKGROUND, OBJECTIVES AND APPROACH

### Background (continued)

#### Requesting Departments

Departments outside of DTS may request software and licenses off of the contract. The requesting department is responsible for determining the software / license to purchase, and requesting the item from DTS to create a PO and review and approve invoices.

#### Department of Management and Finance (“DMF”)

DMF oversees all of the processes and record keeping of the County’s financial transactions. The Purchasing and Accounts Payable divisions are part of DMF and act as support functions for departments managing vendor contracts. Specifically, Purchasing administers the solicitation process and processes requests for procurement of services and goods by executing purchase orders for approved amounts. Accounts Payable is responsible for processing payments to contractors based on invoices approved by the respective departments.

#### **Common Definitions**

Some common definitions for construction terminology used throughout this section of the report are as follows:

- *Contract Owner / Project Officer* – refers to the County representative responsible for general control, review, and approval of all aspects of the contract, once executed. The Project Officer is appointed by the County’s Department of Technology Services Director or a designee is identified in the contract, who is the primary point of contact for the vendor in executing the terms of the contract.
- *Rider Agreement* – The County can utilize rider agreements (also known as “piggyback”) between vendors and other governmental entities in order to leverage competitive processes utilized by another jurisdiction and reduce the purchasing cycle time. This practice is common amongst government agencies and is allowed, as long as the original contract includes a rider provision and the proper approvals are obtained.
- *Change Order* – refers to an approved additional cost for unforeseen work outside of the original work plan considered in the development of the contract price. If the cost is deemed necessary and appropriate, an executed change order is established to allow the vendor to invoice for the additional work.

#### **Timeline**

Below is a timeline of major events for the project:

Date	Event Description
January 21, 2014	Purchasing Officer authorized the rider agreement of contract 582-14 between the County and SHI International Corporation for Microsoft Products and Services
January 21, 2014	Contract executed
October 17, 2016	Contract renewal effective
<i>No change orders or modifications executed to date (as of April 20, 2017 walkthrough)</i>	
October 16, 2017	Contract expires

## BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

### Objectives and Approach

#### **Objectives**

Contract compliance encompasses all contractual agreements including, but not limited to, vendor agreements. Although certain aspects of the purchasing function are centralized within the Department of Management and Finance, many of the high risk areas like contract administration and monitoring are decentralized to the individual departments.

The scope of this cycle audit encompassed one (1) contract from the Department of Technology Services; contract number 582-14 with SHI International Corporation. Although the County issued a specific Contract Administration Policy effective January 1, 2017, the audit period was January 1, 2016 to April 1, 2017. For transactions from January 1, 2016 to December 31, 2016, testing was limited to substantive procedures as it related to invoice accuracy, invoice compliance with contract terms, payment timeliness, and verification of goods and services. For transactions January 1, 2017 to April 1, 2017, procedures also included department compliance with aspects of the County issued Contract Administration Policy.

The objective of this cycle audit was designed to assess whether the system of internal controls is adequate and appropriate, for effective contract compliance, with selected provisions of the contract as it relates to payment.

#### **Approach**

Our approach to the audit execution consisted of the following phases:

#### Understanding and Documentation of the Process

During the first phase, we performed the following:

- Conducted entrance conferences with representatives from DTS and DMF to discuss the scope and objectives of the cycle audit, obtain preliminary data, and establish working arrangements;
- Obtained copies of financial reports and other documentation deemed necessary and appropriate to gain an understanding of the existing control environment;
- Reviewed the County's Contract Administration Policy related to this cycle audit;
- Conducted interviews with responsible personnel from the selected department / division to obtain an understanding of the unique aspects of the process in order to perform the walkthroughs and our testing; and
- Developed flowcharts of the process(es), which are included in this report.

## BACKGROUND, OBJECTIVES AND APPROACH (CONTINUED)

### Objectives and Approach (continued)

#### Evaluation of the Process and Controls Design and Testing of Operating Effectiveness

The Process and Control Evaluation phase of this engagement consisted of an evaluation of the design and testing of operating effectiveness. We performed walkthroughs and detailed testing of transactions for a sample of 15 invoices (20% of the population) from the entire populations of 76 invoices submitted during the audit period (January 1, 2016 to April 1, 2017). The sample selection was random from the use of the information technology tool IDEA™, and then supplemented to include highlighted transactions from the results of the Computer Assisted Audit Tools analysis. Specific procedures performed included:

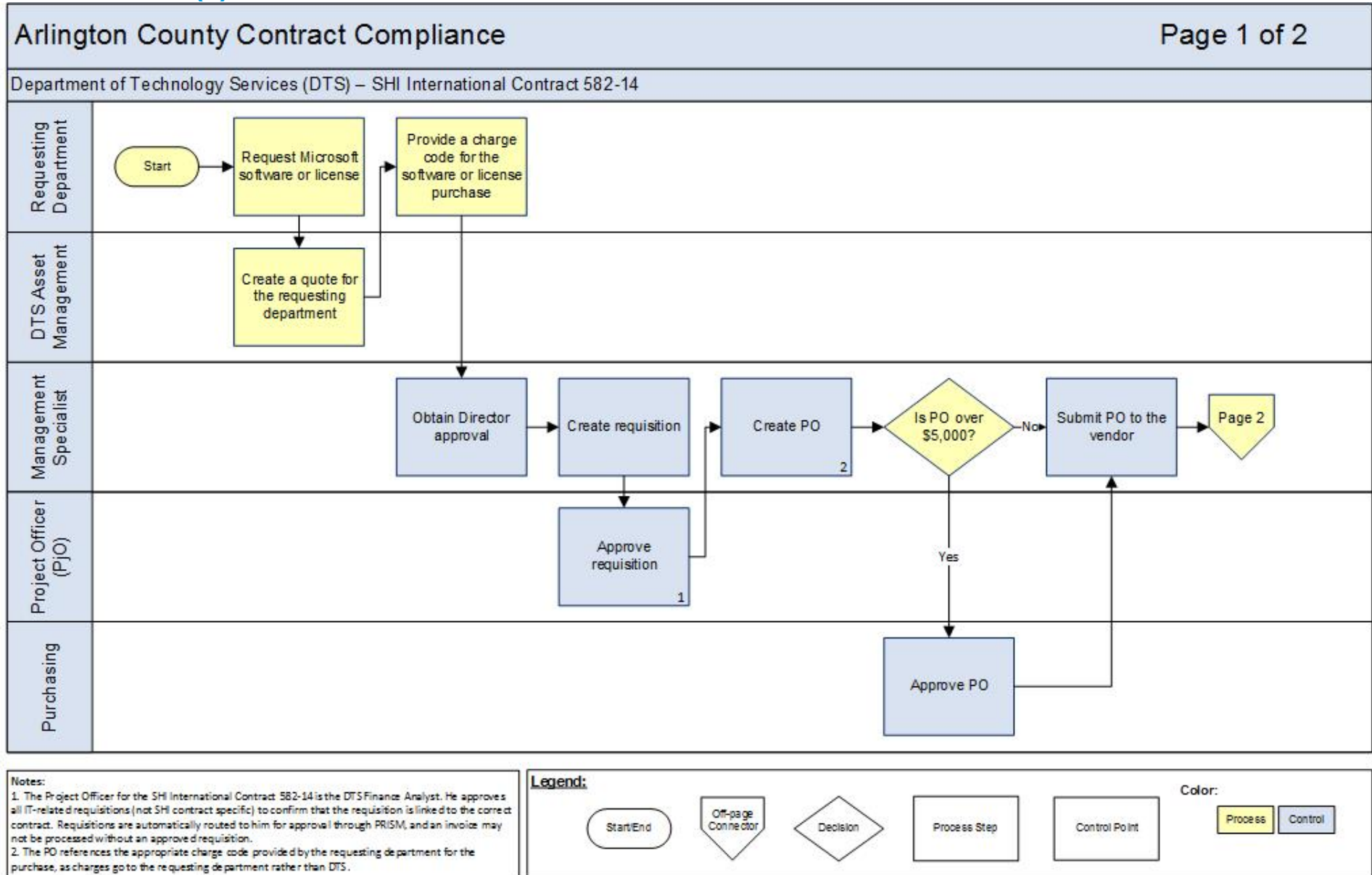
- Gathered background information on the County's contract compliance and monitoring procedures and any required controls or documentation, including contract authorization, if necessary;
- Determined whether the selected department / divisions has related contract compliance procedures outside of County-level procedures;
- Obtained background information on the selected contract, including contract copy, contract administrator information, and detail of expenditures under each contract during our audit period;
- Tested a sample of invoices for the selected contract to determine if the supporting documentation agreed to the payment amount;
- Verified that each invoice was charged appropriately against a Purchase Order as required by the County Contract Administration Policy;
- Inspected invoices to confirm that discount taken per invoice supporting documentation tied to the agreed upon contract discount amounts;
- Determined mathematical accuracy of invoices;
- Inspected invoices for Project Officer sign-off as required by the County Contract Administration Policy;
- Determined if payment was made in a timely manner and in accordance with the pricing terms of the contract and the County Contract Administration Policy, and that payments did not exceed amounts authorized;
- Determined whether goods and services received under the contract was properly verified or monitored prior to payment of the invoice as required by the Contract Administration Policy; and
- Assessed the overall contract compliance process and controls to determine effectiveness.

#### Reporting

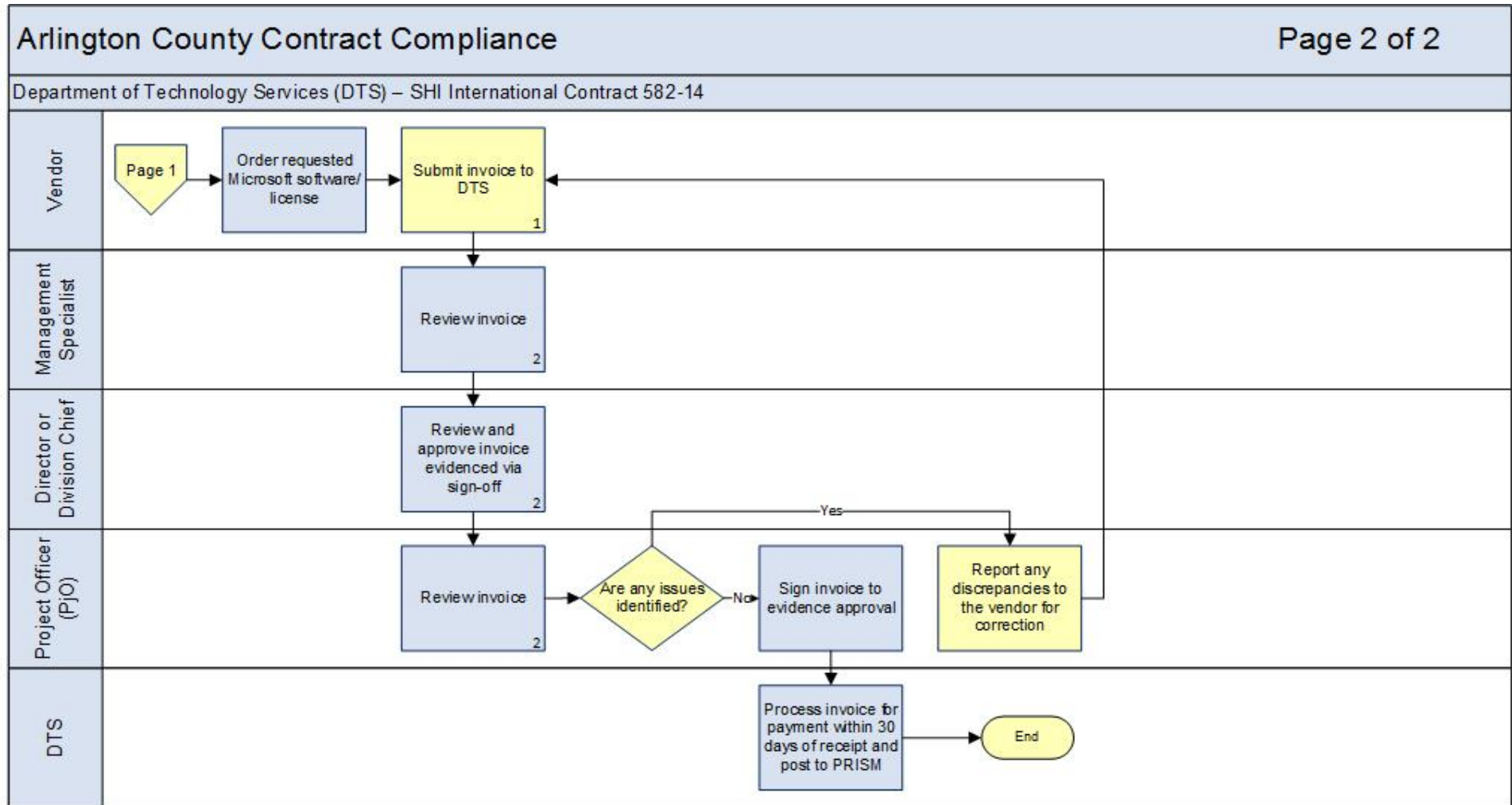
At the conclusion of this audit, we vetted the facts and exceptions noted with DTS. The draft report was submitted to DTS and DMF for review. An exit meeting was held with DTS and DMF to formally review and discuss the draft report and modify accordingly.

Management's corrective action plan with estimated completion dates has been provided and included in the report. Follow-up procedures will be performed after the completion date noted by Management. Follow-up typically occurs after ample time has passed with the new control / procedure in place (generally six months) to verify and report the implementation status of the recommendations and Management's action with regard to the previously reported observations. Objectives of the overall follow-up procedures are to determine if open observations from this audit report has been properly remediated. Follow-up is meant to validate, on a sample basis, the effectiveness of the remediated controls of the previously reported open observations.

## PROCESS MAP(S):



**PROCESS MAP(S) (CONTINUED):**



**Notes:**  
 1. When a department outside of DTS initiates a requisition for software from Shi International Inc the invoice is not reviewed and approved by DTS. Therefore, this invoice process is specific to DTS and no other department. All requisitions are approved by the DTS Project Officer.  
 2. Management Specialist verifies that the correct product was received and billed to the respective requesting department. Director or Division Chief confirms that the invoice ties to the product requested. Project Officer confirms that the invoice ties to the PO and references the correct department.

**Legend:**




**Color:**



## APPENDIX A – RATING DEFINITIONS

Observation Risk Rating Definitions	
Rating	Explanation
Low	Observation presents a low risk (i.e., impact on financial statements, internal control environment, public perception / brand, or business operations) to the organization for the topic reviewed and / or is of low importance to business success / achievement of goals and internal control structure.
Moderate	Observation presents a moderate risk (i.e., impact on financial statements, internal control environment, public perception / brand, or business operations) to the organization for the topic reviewed and / or is of moderate importance to business success / achievement of goals and improve its internal control structure. Action should be in the near term.
High	Observation presents a high risk (i.e., impact on financial statements, internal control environment, public perception / brand, or business operations) to the organization for the topic reviewed and / or is of high importance to business success / achievement of goals and improve its internal control structure. Action should be taken immediately.



RSM US LLP  
1861 International Drive  
Suite 400  
McLean, VA 22102  
(252) 638 - 5154  
[www.rsmus.com](http://www.rsmus.com)

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