

Virginia Information Technologies Agency



**COMMONWEALTH OF VIRGINIA**  
**VIRGINIA INFORMATION TECHNOLOGIES AGENCY (VITA)**  
**SUPPLY CHAIN MANAGEMENT DIVISION**  
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CHESTER, VIRGINIA 23836

**REQUEST FOR INFORMATION (RFI) 2017-14**  
**FOR:**  
**SERVER, DATA CENTER, AND SECURITY SERVICES**

**Issue Date:** September 29, 2016  
**Due Date/Time:** October 21, 2016 @ 3:00 pm Eastern  
**Response Delivery Method:** E-mail attachment to Single Point of Contact  
**Single Point of Contact (SPOC):** Greg Scearce, VITA Supply Chain Management (SCM)  
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NOTE: This public body does not discriminate against faith-based organizations in accordance with the Code of Virginia, §2.2-4343.1 or against a Supplier because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.

VITA is committed to increasing procurement opportunities for small, women-owned, and minority-owned (SWaM) businesses, strengthening the Commonwealth's overall economic growth through the development of its IT suppliers.

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## 1. INTRODUCTION

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The intent of this Request for Information (RFI) is solely to gather information; it is not a formal procurement. Responding to the RFI is not a pre-requisite to submitting a proposal for any subsequent procurement. Respondents should not provide any confidential or proprietary information.

Ownership of all data, materials, and documentation originated and prepared for VITA pursuant to the RFI shall rest exclusively with VITA. All information provided to VITA as part of this RFI will not be publicly disclosed, but shall be subject to public inspection in accordance with the §2.2-4342 of the *Virginia Public Procurement Act and the Virginia Freedom of Information Act*.

### A. IT Infrastructure Services Program (ITISP) Overview

This procurement event is a component in VITA's overall strategy to implement a new IT Infrastructure Services Program (ITISP). This program will position VITA to fulfill its vision to "deliver agile technology services at the speed of business" by better balancing the needs of the individual agencies and the enterprise in a multisupplier ecosystem. The ITISP is intended to accomplish the following:

- **Maintain and improve service quality.**
  - Develop the capability to address evolving agency needs and create opportunities to improve service performance without degrading service reliability, security, and quality.
- **Ensure cost competitiveness – both now and in the future.**
  - Structure service offerings so they can be more easily compared to market services at market rates; offer a menu of service options to customers.
- **Create a platform view of service delivery that is highly visible and accountable.**
  - Provide for Enterprise and Agency visibility of consumption, cost, performance, and the responsiveness of suppliers. Establish a governance structure and forums to promote stakeholder engagement and improve the balance of agencies and enterprise needs.

Procurement of new services that will transition the Commonwealth from a single supplier model to an integrated multisupplier model is occurring over three waves. VITA has begun implementing Wave 1 of this transition by awarding a contract for Messaging services in July 2016 and a contract for IBM Mainframe services in September 2016. Wave 2 of this transition begins with this Request for Proposal ("RFP") soliciting proposals for the services of a multisourcing service integrator (MSI). That procurement was released on September 29, 2016 under RFP# 2017-03. The Wave 2 procurements are also intended to include services for Server, Storage, Data Center LAN, Data Center Facilities, and Managed Security Services (abbreviated as "Server, DC, and Security").

Respondents to this RFI are encouraged to review the publicly available RFP# 2017-03 documents for additional context. Note also that there will be a Pre-Proposal Web Conference for the MSI RFP, scheduled for Tuesday, October 4<sup>th</sup> at 2 pm. Information to register for the conference is indicated in the RFP Instructions for RFP# 2017-03.

## B. RFI Purpose

VITA has decided to accelerate its MSI implementation, such that the contract for RFP# 2017-03 is awarded while the other Wave 2 procurements are still underway. The initial focus on the MSI RFP allows additional time at the front-end of the timeline to gather further market research for Server, DC, and Security via this RFI. This RFI will allow VITA to improve the quality of the resultant RFP or RFPs to be released around the end of 2016.

Currently, VITA's Wave 2 internal RFP teams are structured around two separate potential RFPs: 1.) Server, Storage and Data Center Services and 2.) Managed Security Services. However, VITA is interested in identifying the most efficient demarcation or bundling of these services between RFPs. For example, perhaps it would be more efficient to separate the Data Center facilities from the other Server services; or perhaps it would be better to include some or all of the Security services with the Server RFP. VITA anticipates resolving these decisions, and other questions as detailed in the Section 5 (Questions) below, in part by considering feedback obtained from marketplace participants via this RFI.

The Commonwealth has the following goals for the procurements:

### **Server, Storage, and Data Center Services**

- Assume all existing Services for Server, Storage, Data Center LAN, and Centralized Data Center facility currently provided to the Commonwealth via the Comprehensive Infrastructure Agreement (CIA) with Northrop Grumman.
- Transition to the next generation of delivery for Server, Storage, and Data Center services to VITA and Customers, taking advantage of the ever-changing technology landscape while decreasing costs to VITA and Customers.
- Provide compute, storage, and Data Center LAN services that are flexible, rapidly provisioned, cost effective, transparent, and elastic to meet VITA and Customer needs while preserving enterprise requirements such as security and compliance management.

### **Managed Security Services**

- Replace the existing security services included within the Comprehensive Infrastructure Agreement (CIA) with Northrop Grumman.
- Support VITA's Commonwealth Security and Risk Management (CSRM) directorate by acting as its operational "hands and feet":
  - Advising on risks and standards development
  - Assessing vulnerabilities and compliance (suppliers and agencies)
  - Provide security monitoring and integration tools across the environment
  - Respond to and address security risks and incidents
  - Provide tools and technologies to protect the environment from compromise
  - Provide security services that are adjustable to meet compliance needs of the Customer and adaptable to advancements in both security and technology industries
  - Establish, implement and maintain a secure enterprise information technology environment ensuring the confidentiality, integrity and availability of critical Commonwealth information and systems
  - Provide VITA and its Customers with access to their data and metadata, in real-time

## 2. SUBMISSION LOGISTICS AND CONTACT INFORMATION

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<b>Issue Date:</b>	September 29, 2016
<b>Due Date/Time:</b>	October 21, 2016 at 3:00 pm EST
<b>Response Delivery Method:</b>	E-mail attachment or CD sent to Single Point of Contact. Note: e-mail must be received by the due date and time; CD must be post-marked by the due date, but can be received later. E-mail attachments must be limited to 10 MB.
<b>Single Point of Contact (SPOC):</b>	Greg Searce
<b>Telephone:</b>	(804) 416-6166
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<b>Mailing Address:</b>	11751 Meadowville Lane, Chester, VA 23836
<b>Pricing:</b>	No pricing information should be submitted
<b>Document Format:</b>	Return this document, having populated Section 4 (Respondent Contact Information), Section 5 (Questions) below, and Section 6 (Feedback Regarding RFI Documents)
<b>RFI Questions and Answers:</b>	Suppliers may submit questions regarding this RFI at any time via e-mail to the SPOC.

### **3. OVERVIEW OF RFI DOCUMENTS**

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Within this RFI, VITA has chosen to release the following documents, which are drafts of some key documents anticipated for release in a final RFP or RFPs.

- Exhibit 2.1-a: Server, Storage, Data Center LAN Services
- Exhibit 2.1-b: Data Center Facilities Services
- Exhibit 2.1-c: Managed Security Services
- Exhibit 2.2: Cross-Functional Services
- Exhibit 3.1-a: Server, Storage, Data Center LAN, and Data Center Facilities SLA Matrix
- Exhibit 3.1-b: Managed Security SLA Matrix
- Exhibit 3.2-a: Server, Storage, Data Center LAN, and Data Center Facilities SLA Descriptions
- Exhibit 3.2-b: Managed Security SLA Descriptions
- Exhibit 4: Pricing and Financial Provisions
- Exhibit 4.1-a: Server, Storage, Data Center LAN, and Data Center Facilities Pricing and Volumes Matrix
- Exhibit 4.1-b: Managed Security Pricing and Volumes Matrix
- Exhibit 4.2-a: Server, Storage, Data Center LAN, and Data Center Facilities RU Definitions
- Exhibit 4.2-b: Managed Security RU Definitions
- Exhibit 4.4: Form of Invoice

#### 4. RESPONDENT CONTACT INFORMATION

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Please provide your contact information in the box below.

Contact Information	Enter your response here, enlarging the box as needed
Company Name	Atos IT Solutions and Services, Inc.
Company Mailing Address	2500 Westchester Ave, Suite 300 Purchase, NY 10577
Company Website Address	atos.net
Name of Contact Person	Chris Hollis
Contact Person E-mail Address	Senior Director, Sales & Client Management
Contact Person Telephone #	(214) 808-8215

## 5. QUESTIONS

Please use the table to respond to the Commonwealth's questions.

Ref#	Category	Question	Supplier Response
<b>A. Server/Storage Services</b>			
Q1.	Server/Storage	The Commonwealth has upwards of 10 non-centralized Data Centers in Agency-operated buildings, primarily in the metro Richmond area. What are examples of Suppliers' best practices in managing the Servers, Storage, Firewalls, and Data Center LANs in non-centralized (Agency) facilities?	<p>In 2012, Atos took over the State of Texas contract with 31 Agency Local Data Centers (LDCs) and more than 900 remote locations. There were several best practice approaches that have enabled us to be successful:</p> <ul style="list-style-type: none"> <li>• To ensure a centralized view of all non-centralized facilities and infrastructure, Atos employed an aggressive schedule to deploy monitoring tools to each facility. Secondly, Atos completed a physical inventory to ensure all assets were accounted at each site. Thirdly, we identified all the devices that could not be remotely managed, primarily due to age.</li> <li>• In parallel with the these actions, Atos created a team of hardware technicians and customer service managers who visited agency sites on a regular schedule to ensure smooth operations and look for hardware issues, with a special focus on monitoring equipment identified as too old for proactive monitoring via the software tooling.</li> <li>• Next, in cooperation with the Department of Information Resources (DIR), the State of Texas incented agencies to begin an aggressive server consolidation and refresh program that got much of the aged hardware out of the environment and reduced the number of high-impact hardware failures.</li> </ul>
Q2.	Server/Storage	What does the Supplier recommend for the length of the contract for	Atos recommends a five-year contract with two, two-

Ref#	Category	Question	Supplier Response
		Server, Storage, and Data Center Services? Please describe benefits and trade-offs.	year extensions; this structure would allow longer amortization of transformation expenses and spread the cost of procurement. Atos would recommend inclusion of a clause that will allow for renegotiation should a significant technology change occur to encourage ongoing partnership and bringing current technologies to the Commonwealth.
Q3.	Data Center	What do you recommend for the length of the contract for the Data Center Facility for this type of environment?	Atos recommends the length of the contract for the Data Center Facility for this type of environment should be co-terminous with the Server and Storage contract. This enables any potential data center migration to occur where the hosted infrastructure is due for refresh. Ideally, any data center migration, if needed, would benefit from being timed to a major refresh of infrastructure.
Q4.	Server/Storage	What does the Supplier recommend for technology refresh rate for the different types of Devices in VITA's environment? Is there an impact on the length of the services contract?	Atos recommends a standard five-year cycle for the Commonwealth. This standard cycle doesn't burden the Commonwealth with unnecessary hardware refreshes while the Atos Edge platform provides increased agility, thus enabling VITA to respond to rapidly changing market, business requirements, and customer needs with the additional availability of Private, Public, and Hybrid cloud options. There is no impact to the length of services contract.
Q5.	Server/Storage	The Commonwealth is interested in a separate hardware charge in the Server RUs to account for the initial capital outlay for physical servers. Is there a better way to represent the cost differences and hardware refresh cycle in the Server RU structure?	Atos agrees with the Commonwealth's approach to a hardware services charge. This will enable VITA to receive the best price for hardware possible while minimizing the risk to your vendor(s). We do this on accounts today and have found it works extremely well for achieving our clients' goals around hardware procurement.
Q6.	Server/Storage	The Commonwealth is proposing tiering of services for Server and Storage in an attempt to align costs with availability and performance.	Atos agrees with the Commonwealth's approach to tiering services and applying coordinating SLAs for

Ref#	Category	Question	Supplier Response																																	
		<p>Based on your experience, do these tiers of service have any challenges in developing a solution? Do you have experience with these service tiering model? Do you have any recommendations or enhancements for the Commonwealth to consider?</p>	<p>those services. In our experience, we've had no issues implementing or running services when based on standard, measurable criteria. If the criteria become vague and unmeasurable, it becomes difficult to properly hold all parties accountable.</p> <p>Atos also would recommend additional volumetric levels that encourage agencies to participate in VITA services and lower the overall costs to all participating agencies as volumes increase.</p> <p>Below is a snapshot of what we've done on other accounts for resource unit tiering:</p> <table border="1" data-bbox="1270 625 1921 1412"> <thead> <tr> <th>Premise/Vendor</th> <th>Resource Category</th> <th>RU / Classification</th> </tr> </thead> <tbody> <tr> <td>Atos OnDemand</td> <td></td> <td></td> </tr> <tr> <td>AWS</td> <td></td> <td></td> </tr> <tr> <td>Azure</td> <td></td> <td></td> </tr> <tr> <td>OnPrem Agency</td> <td></td> <td></td> </tr> <tr> <td>OnPrem CDC</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Logical Server - LPAR</td> <td>CPU Memory</td> </tr> <tr> <td></td> <td>Physical Server</td> <td>Small Medium Large X-Large Jumbo</td> </tr> <tr> <td></td> <td>Virtual Server</td> <td>Small Medium Large X-Large Jumbo</td> </tr> <tr> <td></td> <td>Storage</td> <td>Tier 1 - Platinum Tier 2 - Gold Tier 3 - Silver Tier 4 - Bronze</td> </tr> <tr> <td></td> <td>Backups</td> <td>Active Long-Term</td> </tr> </tbody> </table>	Premise/Vendor	Resource Category	RU / Classification	Atos OnDemand			AWS			Azure			OnPrem Agency			OnPrem CDC				Logical Server - LPAR	CPU Memory		Physical Server	Small Medium Large X-Large Jumbo		Virtual Server	Small Medium Large X-Large Jumbo		Storage	Tier 1 - Platinum Tier 2 - Gold Tier 3 - Silver Tier 4 - Bronze		Backups	Active Long-Term
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Q7.	Server/Storage	The Commonwealth currently spreads costs across a very simple RU model. Do you have an enhanced RU model that could offer a larger variety of services while minimizing the RUs and their complexity?	<p>Atos has many examples of discrete resource unit pricing. The industry move to more transparency in pricing for shared services allows for greater flexibility and alignment to market pricing. A more discrete resource unit model allows agencies to choose the services that are required for their business cases and allows VITA to have a different solution option for the individual and changing needs of the agencies.</p> <p>Please refer to our response to Q6 for an example of the RU structure used at Texas DIR.</p>
Q8.	Server/Storage	The Commonwealth is including Bronze thru Platinum service levels for Server as examples of service categories. What would be required to implement this model in the Commonwealth?	<p>The Commonwealth and Atos need to agree on criteria that fulfill each service level to implement this model. .As demonstrated above we have done this successfully for many other Atos accounts.</p>
Q9.	Server/Storage	Do you see a better way to bundle or spilt the services we are requesting, in order to more effectively integrate with other towers (including MSI), and obtain more flexibility in the Commonwealth's IT environment while maintaining appropriate Governance and security?	<p>Atos recommends limiting the number of vendors per tower to no more than one to decrease the likelihood of vendor coordination issues that would result in longer server build or repair times. Our experience has shown that introducing multiple vendors per tower actually sub-optimizes the support process. This puts greater stress on the MSI, who does not have that many contractual methods to deal with inter-vendor delivery issues.</p> <p>Atos believes in and supports the MSI model. However, the Major Incident Management (MIM) function is very tower-specific. We recommend separating that from the MSI and having each Service Component Provider (SCP) use their own MIM. Those resources would be better able to integrate into the service delivery functions inside their own tower and also be better able to perform escalation.</p> <p>Additionally, strong Operating Level Agreements</p>

Ref#	Category	Question	Supplier Response
			<p>(OLAs) should be negotiated and enforced between the SCPs to minimize the vendor coordination.</p> <p>The key to ensuring excellent service delivery is to make sure that vendors have experience with each other in a multi-tower service delivery model. In the State of Texas, DIR conducted sessions with both the SCP and MSI candidates to ensure they could work together effectively. This model proved to be very successful and is highly recommended.</p> <p>Atos also recommends that the server and network component providers deliver the service desk based on our experience implementing and running inside of the MSI environment. By having a single service desk at the MSI level, you create a single entity for customers to call for all problems and tickets, but you also create additional work on your service component providers.</p> <p>Typically, you should have 70%-80% of all events resolved at the Level 1 service desk. However, in a MSI model where the server/network/data center/security providers do not have their teams taking those initial events, you will drive that percentage down or close to 0%. It also creates a delay on response time by having to route additional information through multiple channels.</p>
Q10.	Server/Storage	Are their new Storage offerings, like Object Based Storage or predictive storage, that the Commonwealth should include in storage or enhanced services? How do you offer and charge for virtual storage?	<p>Atos recommends that the Commonwealth consider the use of Object Based Storage for unstructured data. Object Based Storage can reduce complexity, and increase responsiveness, is highly scalable and provides a high level of resiliency. Atos' charges by used capacity in GB. Atos has partnered with EMC to deliver an Object Based Storage offering and looks forward to discussing this offering with the Commonwealth.</p>

Ref#	Category	Question	Supplier Response
Q11.	Server/Storage	The Commonwealth is interested in ensuring it provides optimal storage performance and availability for VITA and VITA's Customers. How do you propose to provide and measure this performance?	<p>Atos' Managed Application Storage Services (MASS) provides six storage classes that offer performance characteristics and availability service levels to meet the diverse needs of different applications. MASS supports different RTO and RPO requirements, DR and High Availability architectures, network connection technology, and access protocols. Storage performance indicators, provided for reference, include Diamond, Platinum, Gold, Silver, and Bronze, each with differing IOPS per TB and response times.</p> <p>Atos uses a standard tool set to monitor and measure storage, consisting of EMC's Storage Resource Management (SRM) and Brocade Network Advisor (BNA). Several measures are available, including response time, utilization, and availability.</p>
Q12.	Server/Storage	The Commonwealth has traditional x86 virtual servers, but it is also interested in the capabilities of a private cloud. Could they be combined or left separate? Please describe how this could be accomplished most effectively.	<p>Atos recommends a combined traditional, private and third-party cloud, bridging the environments with Atos Edge, which provides one unified view of all IT assets and delivers faster value to VITA's users.</p> <p>With Atos Edge, we can support the Commonwealth's transformation of infrastructure, applications, and security from your current mode of operations, through an interim mode, and on to your future mode of operations, all using a single, frictionless environment that enables VITA's transformation journey across all layers of your operations to a private cloud and also with options to choose public providers such as AWS GovCloud or Azure-G.</p>
Q13.	Server/Storage	How does Database as a Service make sense for an Enterprise like the Commonwealth? Do you have any recommendations for how to charge for enhanced Database services (i.e., Development DBA)?	<p>Database as a Service enterprise services can provide the Commonwealth with several benefits, including the following:</p> <ul style="list-style-type: none"> <li>• A DBA team that can be leveraged as workload increases or decreases on a daily, weekly, or</li> </ul>

Ref#	Category	Question	Supplier Response
			<p>monthly basis; short-term staffing needs are easily addressed by the Commonwealth with Atos DBA services</p> <ul style="list-style-type: none"> <li>• The accommodation of industry standard database types (for example, SQL, Oracle, DB2) with our specialized DBA staff</li> <li>• Cost control by using different database support levels—varying by availability service level, support hours, and maintenance windows</li> </ul> <p>Atos is flexible in how to charge for enhanced database services. A typical pricing plan is developed to build in a baseline of service requests and included in a fixed monthly charge.</p>
Q14.	Server/Storage	The Commonwealth wants to provide cost effective solutions to VITA and the Agencies. What do you describe as the key cost and value drivers that would help the Commonwealth offer services that are not cost prohibitive to deliver? Do you see any requirements in the description of services in this RFI that would cost more to meet than the business value they provide?	<p>Key cost and value drivers can be realized in a variety of ways; however, in the server, data center, and security areas, the drivers can be seen in the advance of technology services offered by providers. Here are some areas where cost and value can be delivered by the Commonwealth to its agencies:</p> <ul style="list-style-type: none"> <li>• Achieving economy of scale in the data center to provide a hardened facility that’s compliant with statutory security or regulatory requirements</li> <li>• Through its providers, offering on-demand capacity and <b>provisioning without capital investment</b>; self service capability reduces cost prohibition even more</li> <li>• Provided value through tools integration and automation, <b>by increasing reliability and reducing downtime</b> for end users</li> </ul> <p>Atos Edge provides cost-effectiveness and added value through our investment in these technologies, applied at a scale to achieve lower costs, with on-demand scalability, integration, and automation</p>

Ref#	Category	Question	Supplier Response
			<p>between tools and infrastructure.</p> <p>Please refer to Atos' response to Q9. We highlight some areas where costs are duplicative or increased due to the nature of how the MSI is being implemented.</p>
Q15.	Security	The Commonwealth is interested in an Enterprise Key Management System for compliance and security. How do you propose the Commonwealth request Key Management services?	<p>Atos recommends including Enterprise Key Management as part of the data center, security, and storage RFP.</p> <p>Atos' Managed Public Key Infrastructure (PKI) Services provides a standard off-the-shelf PKI Service for low-cost, robust internal issuing of digital certificates. It runs on an Atos standard Windows OS platform. The service covers both the setup and operational delivery of single or multiple Microsoft PKI environments.</p> <p>Atos also provides advanced hardware-based Key Management Services, Encryption, and Smart Card solutions that specialize in products where a higher level of security is desired or necessary.</p> <p>A comprehensive analysis of the Commonwealth's exact security requirements, including currently deployed methodologies, should be conducted prior to any decision-making process toward establishing a centralized Key Management System.</p>
Q16.	MSI	Identity and Access Management (IAM) services and the systems supporting those functions are currently split between multiple providers. How do you propose bringing these services together to provide a single integrated service?	<p>Atos proposes to consider managing IAM as a process, and not just a technology. The IAM process is required to map relationships between users and many things (or objects); therefore, it must adhere to security policy and meet business demands for controls that reflect asset classification, application use and access levels, and so on.</p> <p>Analyzing the various IAM process needs first, Atos can identify requirements not previously known or</p>

Ref#	Category	Question	Supplier Response
			<p>managed improperly (creating gaps or obstacles). By identifying this gaps, Atos can formulate a better process and corresponding solutions that more effective and efficient for users, business stakeholders and security stakeholders across the enterprise.</p>
Q17.	MSI	<p>The Commonwealth has defined the cross-functional requirements in Exhibit 2.2. Do you have any comments in the structure and handoffs identified in this document? Do you have any prior experience working with MSIs? Do you have any recommendations regarding the approach for how the MSI should interact with the other suppliers?</p>	<p>The structure and handoffs of the cross-functional requirements identified in Exhibit 2.2 fit nicely with the Atos support structure for Service Management and our standard transition methodology. The Atos Service Management Center (SMC) is a team of process management professionals and experts who actively drive the delivery of service across Managed Services delivery teams by implementing, managing, and governing best practice processes that are ITIL V3-based (2011) and include ISO 20000 (Service Mgmt), NIST (Cyber Security and Risk Management), and ISO 9001 (Quality Management). The SMC is dedicated to ensuring and improving quality, operational efficiency and driving consistency in the delivery of services. During transition, the Atos SMC will work with the Commonwealth, the MSI, and other providers to complete the following:</p> <ul style="list-style-type: none"> <li>• Alignment and mapping of the processes, integration points, and handoffs</li> <li>• Development of mutual process documents</li> <li>• Report development and distribution</li> <li>• Continual improvement plan development</li> </ul> <p>Within the Texas DIR environment today, Atos operates within an MSI model adopted by the State for IT services, very similar to what VITA requires. Texas had never operated in an MSI model before, and Atos worked with the MSI to create and develop</p>

Ref#	Category	Question	Supplier Response
			<p>the MSI interface process that is in use today.</p> <p>Atos has provided these services since 2012, when they were seamlessly transitioned from IBM, and we have gained invaluable experience by collaborating with the MSI. Atos has extensive experience operating in this model in the public sector and will ensure a successful adoption of the model for VITA.</p> <p>Atos recently received a 100% customer satisfaction rating from more than 30 agencies in Texas, which showcases our experience and success working in a MSI model.</p> <p>Atos also works in an MSI model at the State of Georgia where we have received numerous accolades from the client for our support, recently receiving a Net Promoter score of 10 for support services on a 1-10 scale. We work seamlessly with the MSI process at the State.</p>
Q18.	MSI	Do you see any benefits or challenges in requiring the Data Center facility provider to also be responsible for providing common operating monitoring groups in the same solution (e.g., CMOC, ITOC, SOC, NOC)?	<p>We assume this question is whether or not it's beneficial to have the Data Center facility provider also provide centralized monitoring for network, security, servers, etc.</p> <p>If so, we see a challenge and a concern in this approach, assuming the Data Center facility provider is a different provider from, for example, the security services provider, the network provider, server services provider, etc.</p> <p>Using Atos as an example, our monitoring tools are automated and extensively integrated with our other management tools. This is part but not the entire value proposition that we bring to the Commonwealth: unique and compelling IT management and processes, enabled by Atos' standard tools.</p>

Ref#	Category	Question	Supplier Response
			<p>This value would be diminished by requiring the Data Center facility provider to be responsible for common operating monitoring groups such as a SOC or NOC. In our opinion, it would add unnecessary costs and hamper the ability of service providers to provide their best service to the Commonwealth and could possibly lead to “finger-pointing” during critical situation where issue resolution is time sensitive.</p>
Q19.	MSI	<p>The Commonwealth currently has a single traditional DR solution that requires the entire backup Data Center to be failed over. There is a desire to move to a more flexible solution that allows single Agencies or even applications to be failed over individually. This process requires design, development, operations, testing, and coordination. What role should VITA’s MSI should play in this effort in relation with the Server Services provider?</p>	<p>Our experience with an MSI at the State of Texas has provided some perspective on the MSI’s role in the area of DR. The MSI’s role is in overseeing and coordinating the service providers, with added responsibility in DR for the following:</p> <ul style="list-style-type: none"> <li>• Working with state agencies to determine disaster impact assessment</li> <li>• Development and agreement on recovery requirements by the stakeholders</li> </ul> <p>In terms of the DR transformation process, the MSI would coordinate the efforts of the service providers, including Server Services, to design, develop, operate, and test the components and systems that comprise DR the plan and infrastructure capability. On an ongoing basis, the MSI plans and coordinate DR tests, updates the DR plan (or technical recovery guide, TRG) and ensures the service providers are in a ready state for a disaster.</p>
Q20.	Data Center	<p>The Commonwealth is interested in Multi-site High Availability and Disaster Recovery Services. At a high-level, what do you recommend on the number and locations of centralized Data Centers the Commonwealth should utilize for that purpose? Any tradeoffs?</p>	<p>Atos recommends the Commonwealth adopt a two-physical-data-center approach. Centralizing in two data centers reduces complexity and recovery time objectives, as well as less duplication of security, personnel, data, and networking reduces cost. Two centralized data centers can also be used for DR from remote offices. More data centers would potentially</p>

Ref#	Category	Question	Supplier Response
			allow higher resiliency but at a higher cost.
Q21.	Migration	Suppliers will be required to provide an implantation plan to specify how they will take over responsibility for the existing environment. The Commonwealth is also interested in recommendations with regard to how the Commonwealth could migrate or transform to new Service offerings. What do you recommend for this migration plan?	<p>Atos recommends a partnership approach for VITA to transform existing and integrate new services. Key to any successful transformation is a robust governance structure that allows agencies to decide what key architectural directions in which they need to move. Additionally, it's important to establish reference models for services which will increase the likelihood new services can be adopted by agency customers. The State of Texas adopted reference models for servers, OS, and key COTS such as DBMS and middleware. This made it much easier to adopt a cloud strategy because that's all most cloud vendors support. Absent that, the capability would be there, with no real way for adoption.</p> <p>Atos recommends a contractual method to allow SCPs to adopt "disruptive technology". Many providers will not find it in their best interest to change technology direction if it's not in their favor. The ability to migrate the State of Texas to Hybrid Cloud Services (a significant contract change halfway through the term of the contract) came about because of the willingness of DIR and Atos to cooperate in this new venture. A contract construct to allow for that "disruptive technology" will make this more likely.</p> <p>Atos recommends a partnership approach for VITA to integrate new services. The key things to remember are centered on creating an environment that allows VITA to hear the voice of all its providers along with their customers to create a solution that works within the program, is cost competitive and meets your business objectives. To do so, you have to continually bring together all those parties for open dialog and</p>

Ref#	Category	Question	Supplier Response
			<p>participation. This can be obtained by creating solution groups between the above mentioned parties that allow those business issues to be brought forward, shared among customers for common themes, so that your providers can bring back the appropriate architecture for review and signoff. By having all parties participate in the ownership and success of new services, you create a higher rate of success for the offering itself.</p> <p>Additionally we recommend technology roadmaps that are provided not only by your individual providers, but by all the providers together with the MSI that enables VITA to truly encompass not only what's going on to today, but what's happening three, five, or 10 years from now.</p>
Q22.	Enhanced Services	<p>The Commonwealth is interested in receiving proposals to include new enhanced services, (e.g., Cloud, Analytics, Managed File Transfer) Can you recommend any other such enhanced services the Commonwealth should also consider including at the moment? How would you recommend these services be delivered?</p>	<p>Atos recommends several enhanced services that are included with our Atos Edge solution.</p> <p><b>Journey Analytics.</b> Atos can provide Commonwealth agency clients with journey analytics to establish patterns associated with the consumption of services. This provides greater transparency into service delivery while helping improve CSAT, internal SLAs, or other KPIs. By gaining greater visibility and improving decision-making, we can collaborate with our clients to leverage this user-generated insight to support faster innovation. This allows you to iterate and explore services and channels with the help of analytics that prioritize processes and supportive digital technologies using data from your users.</p> <p>This same approach to improvement of Atos Edge services can be applied to client business processes. Through the use of these technologies, the Commonwealth can identify opportunities for increased effectiveness and efficiency.</p>

Ref#	Category	Question	Supplier Response
			<p><b>Process Automation.</b> With our Atos Edge solution, we introduce automation that's appropriate to the mode of IT operations. For current modes of operations, typically on legacy environments, the types of automation vary but are highly industrialized. One example is auto responses to basic incidents in a self-help Service Desk scenario or auto patch roll-out. It also includes automation of basic IT administration tasks.</p> <p>As IT technology moves further toward the more complex and integrated modes of operation, the automation becomes much more sophisticated, where Atos starts to introduce autonomies, automatic application policies, cognitive resolutions through digital labor tools or robotics process automation, and onward to artificial intelligence. Here the tools learn your environment, identify proper resolution scenarios, and assess how to optimally complete these tasks.</p> <p>More digital automation is introduced as your transformation moves closer to your desired state (future mode of operations). This will drive down operational costs, greatly reduce issue resolution times and allow the Commonwealth to address more scenarios or potential defects.</p>
Q23.	Enhanced Services	As the technology landscape changes in the Commonwealth's environment, could you describe other enhanced services that VITA and VITA Customers should consider in the future?	<p>The following enhanced services complement those listed in the SOW:</p> <ul style="list-style-type: none"> <li>• <b>Atos Liber Legacy Modernization</b> software suite (for example, tp, DB, COBOL, Batch) and related platforms and professional services, to migrate legacy mainframe environments to open and modern platforms, for cost reduction and agile business innovation without the need to modify legacy application code.</li> </ul>

Ref#	Category	Question	Supplier Response
			<ul style="list-style-type: none"> <li>• <b>Technology Transformation Services</b> to implement a future state technology ecosystem that supports the Commonwealth’s growth, agility and sustainability. Focus areas include the following: <ul style="list-style-type: none"> <li>– Data Center transformation and hybrid cloud</li> <li>– Application platforming</li> <li>– Workplace migration</li> <li>– Service integration</li> </ul> </li> <li>• <b>Managed Digital Video Surveillance</b> <ul style="list-style-type: none"> <li>– CJIS compliant</li> <li>– End-to-end law enforcement solution</li> </ul> </li> <li>• <b>Next Generation 911, ESInet and Emergency Management Platforms</b>—Unify, powered by Atos, is transforming the way Public Safety and Security are managed today.</li> <li>• <b>OpenScope First Response</b> allows emergency calls to be placed and responded to via text message, video, and social media in addition to traditional voice communication. As a result, citizens have the ability to request emergency services through both traditional and new media, providing the communication pathway to the put which will enable the most effective and efficient method of contacting 9-1-1.</li> </ul>
Q24.	Enhanced Services	What would you propose as a good business case for virtualizing the desktop (offering VDI)?	<p>There are specific use cases that drive the business plan for a VDI implementation. Justification for VDI can be based on financial, risk, security, and end user experience. Some or all of the following are proposed in analyzing the business case for VDI:</p> <ul style="list-style-type: none"> <li>• <b>Financial</b>—Save PC hardware expense and support costs through use of Bring Your Own</li> </ul>

Ref#	Category	Question	Supplier Response
			<p>Device (BYOD) or thin clients. Indirect savings result in fewer service desk calls, desk-side support visits, and delayed hardware refresh. Centralizing storage and backup lowers cost per GB, and there are fewer images to maintain.</p> <ul style="list-style-type: none"> <li>• <b>Risk/Security</b>—Depending on policies, all data can remain in a hardened data center instead of on a laptop hard drive in the field. Data backup is reliable. This also ensures compliance with corporate usage policies and avoids data breaches.</li> <li>• <b>End User Experience</b>—Corporate applications and data can be accessed anywhere on most any device, securely. Downtime is reduced up to 60% with simplified hardware and standard images. Users can have the ability to customize their desktops depending on work profile and Commonwealth policy.</li> </ul> <p>Areas of interest to the Commonwealth may include “at-home” employees, call center agents, or employees in the field.</p>
Q25.	Data Center LAN	What do you recommend as the best demarcation point between the Data Center LAN and the Network or WAN? The Commonwealth wants to make the cleanest scope separation for a future WAN Network RFP.	Atos recommends the demarcation point to be at the WAN router level. This design would allow managed services to be provided by different carriers and telco issues to be isolated at the network border. Additionally, specific performance KPIs could be defined and measured based on circuit characteristics, e.g. bandwidth utilization, transport network errors, dropped packets, jitter, latency, etc.
Q26.	Data Center LAN	In the current RFI, the Commonwealth has bundled Data Center LAN services (e.g., switching, routing, load balancing and firewall) with Server and Storage services. Do you find any challenges, issues, or concerns with this approach and why? Any recommendations?	Atos recommends separating network services from Server and Storage services for several different reasons—for example, monitoring tools and resource skill sets are very different from the team managing

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			the infrastructure; network devices can be qualified (as small, medium, large) and quantified; network-specific SLA/KPIs can be better defined; and service requests can be qualified, and measured by type.
Q27.	Data Center LAN	The Commonwealth did not bundle Data Center LAN services (e.g., switching, routing, load balancing and firewall) with the Data Center Facility services (e.g., HVAC, power, raised floor). Do you believe this is the correct approach? Do you have any recommendations?	This is Atos' recommended approach.
Q28.	Data Center LAN	The Commonwealth is considering decoupling the Data Center Facility services from the Server, Storage, and Data Center LAN services. What do you think of this approach? What do you think are the advantages, disadvantages and tradeoffs of splitting the facility services out versus coupling these services with Server, Storage, Data Center LAN?	The big advantage with the decoupling approach is that Data Center facility costs can be separated, thus considering these costs to vary drastically from one location to another, and be very different from co-lo provider and also be different for non-centralized Data Center locations since they may have different requirements and infrastructure. This also aids in cost transparency so that the Agencies know how costs are allocated.
Q29.	Data Center LAN	Supplier is expected to provide centralized Data Center LAN services. Should LANs in non-centralized Data Centers be part of the scope for Data Center LAN services or bid as part of Network/WAN in a future procurement? What would be the pros/cons and tradeoffs?	Atos recommends including LANs from non-centralized data centers with the scope for data center LAN services. If network devices are qualified (as small, medium, large) and quantified, and if facility costs are separated from the network resource units, network devices can be treated the same way in centralized and non-centralized data centers and in remote offices.
Q30.	Data Center LAN	If the solution includes new Data Centers, who should provision and manage the network connections between the Data Center locations? Should it be the Network Provider, the Data Center Provider or the Server, Storage, Data Center LAN Provider?	Atos recommends that the network provider provision and manage network connections between the data center locations. Atos has partnerships with different carriers and ISP providers around the world. Being an independent service provider, we can choose the best-fitting products from different vendors to optimize the service by considering different aspects (for example, cost, performance,

Ref#	Category	Question	Supplier Response
Q31.	Data Center	How does the Supplier propose to migrate Server, Storage, Data Center LAN services out of the CESC datacenter by June 2019 or earlier? Describe how the Supplier would seamlessly migrate out of CESC like-for-like, transform to new services, or a combination of the two? What are the recommended approaches?	<p>security, reliability).</p> <p>Keys to a successful migration of services are planning, integration with agency business and technical personnel and the pre-placement of technical capacity to allow for a migration of services either over the wire or lift and shift where business needs dictate.</p> <p>To facilitate a data center move by June 2019 (or earlier), we will establish a secondary data center that will be located inside the State of Virginia and then establish an enterprise-class LAN Network, SAN and Backup environment that's appropriately sized to facilitate a migration of services. Additional storage will be provided at the CESC to allow for active storage replication site to site. Vblock and other similar compute platforms will be provided with the appropriate VLAN infrastructure to provide a landing zone for agency compute resources. Virtual instances will be migrated on a schedule that will be developed with the agency to include resources needed for testing. Physical servers will either be migrated over the wire, or lift and shift based on each application's specific business need. Lastly, migration of any existing backup tapes would be either shipped from the current offsite storage location or replicated over the wire.</p>
Q32.	Cloud Services	The Commonwealth is interested in a solution that integrates traditional hosting services with new private, community, and public cloud offerings. How do you propose integrating these services?	<p>Atos recommends our Atos Edge solution, specifically engineered to a common framework to manage the bi-model landscape of legacy and digital IT.</p> <p>The Atos edge solution will support your existing or current mode of operations, including your infrastructure, applications, and security landscape. More importantly, it provides the environment and integrated ecosystem to support your desired future</p>

Ref#	Category	Question	Supplier Response
			<p>mode of operation. With Edge, Atos can support your transformation of infrastructure, applications, and security from your current mode of operations, through an interim mode, and on to your future mode of operations.</p> <p>Benefits include one unified view of the hybrid enterprise, faster value by increasing agility to deliver to Commonwealth agencies, and greater overall control of your private and public cloud offerings.</p>
Q33.	Cloud Services	<p>What would be the best practice with regard to Suppliers owning the cloud contracts and potentially transferring that contract to the Commonwealth? Should the Commonwealth own that contract outright? Are there any other alternatives to be considered?</p>	<p>Atos recommends the server provider own the contract with the cloud providers. The model centralizes risks, management, and support much like procuring software.</p>
Q34.	Cloud Services	<p>When the Commonwealth buys cloud services offerings how do you propose to identify where the data and services are located?</p>	<p>As part of Atos Edge, Atos would partner with VITA’s security and functional leaders to develop a VITA marketplace, using ServiceNow technology, for cloud services as depicted in the diagram that follows.</p>  <p>The VITA marketplace logic would point to the correct locations based on agencies security, data type, and application requirements.</p> <p>The VITA marketplace would allow VITA to place minimum security controls (such as anti-virus, patching, and monitoring) as well as logic so agencies place information with the appropriate security in a cost-efficient service offering. The marketplace would</p>

Ref#	Category	Question	Supplier Response
			<p>ask the agencies to answer specific questions such as:</p> <ul style="list-style-type: none"> <li>• Is this VM test, development, or production?</li> <li>• Does this application contain regulated data?</li> </ul> <p>The VITA marketplace will be a critical connection with the MSI's tool to update the CMDB, adding a further benefit of increasing the CMDB's validity through automated updates of new, revised, and retired VMs.</p> <p>The VITA marketplace would create a catalog of VITA approved services both from third-party cloud providers as well as the VITA Enterprise Private Cloud for agencies to consume. This marketplace would show pricing for applicable cloud services, excluding options that are outside of VITA's allowable criteria, thus giving agencies the flexibility to choose their provider and preferred service location based on their application requirements and internal business case.</p> <p>The solution enables custom VMs outside the catalog to allow maximum solution flexibilities for the agencies while protecting the Commonwealth's data.</p>
<b>B. Financial/Server Storage</b>			
Q35.	Pricing Structure	<p>The Commonwealth is interested in creating the best possible pricing structure for the Services. In light of that fact, Supplier is invited to both comment on the structure described in Exhibit 4.1 and 4.2, and to propose an alternate pricing structure if they believe that it will better serve the interests of both parties.</p> <p>The Commonwealth will contemplate any proposed pricing structure along five dimensions:</p> <ol style="list-style-type: none"> <li>1. <b>Predictable:</b> To the greatest extent possible, customers should be able to forecast charges ahead of time; changes in pricing that occur over time should not be a surprise.</li> </ol>	<p>We recommend the following adjustments to the resource unit categories:</p> <ul style="list-style-type: none"> <li>• Suggest changing metric for "Managed Firewall" to volume collection by device vs. "Traffic inspected in GBs per Firewall".</li> <li>• Hardware Service Charge (HSC)—The suggested calculation uses the Federal Reserve Rate; we suggest a more market average that actually reflects the borrowing rate to vendors to be more equitable.</li> </ul>

Ref#	Category	Question	Supplier Response
		<ol style="list-style-type: none"> <li data-bbox="499 212 1239 381">2. <b>Manageable:</b> The pricing should not be so complex that it is needlessly difficult to administer. If quantities of work or equipment in the environment must be measured, then those quantities should be as easy and transparent as possible to measure.</li> <li data-bbox="499 407 1239 576">3. <b>Fair:</b> The service pricing must be a reasonable proxy for a services provider's underlying costs and should adequately recover those costs. Additionally, to the extent possible, the party that causes any incremental cost should bear that cost.</li> <li data-bbox="499 602 1239 803">4. <b>Incentives:</b> All pricing structures will incentivize certain behaviors and discourage others. The goals of the sourcing program must be kept in mind when considering the behaviors that might be driven by a pricing structure. For example, a goal to encourage server consolidation might include reduced cost at a centralized data center.</li> <li data-bbox="499 829 1239 1105">5. <b>Flexible:</b> As consumption moves up and down, the charges should also adjust. Technology is an evolving industry, and the ability to turn down an old service to turn up a new service is one of the benefits of an efficient IT sourcing agreement. Such adjustments may include minor volume changes month to month, significant scope additions, reductions, or terminations, and ability of large service providers to re-deploy investments.</li> </ol>	<p data-bbox="1268 212 1904 488">We suggest looking at adding a percentage savings off of RU's for being current on hardware and software and a percentage increase on RUs for being beyond N-1 currency levels. This motivates agencies to stay current on their technology and you can hold providers responsible by leveraging SLAs and MSI governance while making your providers happy in not having to support out-of-date technologies.</p>
Q36.	Inventory and Volume Collection	<p data-bbox="403 1138 1239 1445">The Commonwealth is interested in introducing new Resource Units that do not exist in the current contract; in order to fairly compensate Supplier for service delivered, and support the other goals described in question 36, Supplier is asked to describe their experience and approach to collecting and verifying volumes both before and after contract signing, and the approaches they use to adjusting financials in the event that the initial count is incorrect. For example, today database support is provided by the Supplier, but is not separately billable. The Commonwealth sees an advantage to separating out</p>	<p data-bbox="1268 1138 1904 1445">Prior to contract signing, the due diligence process is an indispensable prerequisite on the way to the conclusion of a successful outsourcing engagement. It also supports the development of a baseline of the existing customer services and business environment so that VITA and Atos can agree on the formal scope of the services that Atos will be committed to provide. The approach is systematic and structured, and it will involve VITA at all stages, where we both</p>

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		<p>database support and making it a separate chargeable unit, how would the service provider collect and verify the volumes to support this chargeable unit?</p>	<p>strive to reach a winning situation with few subsequent surprises. During the due diligence phase, we would use the HP Universal Change Management database for midrange servers.</p> <p>Components gathered during due diligence include the following:</p> <ul style="list-style-type: none"> <li>• Establishing the due diligence baseline</li> <li>• Validating assumptions with regard to VITA’s capabilities, liabilities, assets, current projects, and other information</li> <li>• Planning and preparing for transition</li> <li>• Validating the proposed solution</li> <li>• Identifying the potential for cost savings and continuous improvement measures through the lifecycle of the contract</li> </ul> <p>Atos’ due diligence process can be summarized as follows:</p> <ul style="list-style-type: none"> <li>• <b>Preparation</b>—Ensure that the scope of due diligence has been clearly outlined and that it will be executed smoothly.</li> <li>• <b>Information Gathering</b>—This activity includes meetings with applicable stakeholders at VITA.</li> <li>• <b>Information Processing</b>—The goal of this activity is to verify completeness, quality, and plausibility of the data. The due diligence team compares the data received with assumptions, metrics, risks etc., identifies gaps, summarizes the information, and documents the results.</li> <li>• <b>Evaluation</b>—In this activity, the findings of the investigation are evaluated against the proposed solution, financial model, asset inventory, contract, service levels, risk register, and</li> </ul>

Ref#	Category	Question	Supplier Response
			<p>assumptions to highlight any differences that may result in changes to any of these work products. The goal of this activity is to collate all information obtained or verified during the due diligence process and present it in a formal manner for use by the solutions teams in developing subsequent client inputs. Following this stage, the baseline is confirmed, service and solution gaps are identified, and specific areas of concern or improvement are highlighted.</p> <ul style="list-style-type: none"> <li>• <b>Acceptance (and Subsequent Steps)</b>—The goal of this activity is for VITA and Atos to have a common view of the actual status of the whole outsourcing engagement as a basis for the contract and agree on contractual changes, if needed.</li> </ul> <p>Following contract signature, Atos will, in a mutually agreed frequency and time line during the first six months after commencement, re-evaluate applicable volumes. This information will be reviewed with VITA; if these volumes are outside of the ARC/RRC purview, the contract will be adjusted as needed using the agreed-upon change control process.</p> <p>Regarding database support specifically to support it being a separate chargeable unit, collection of volumes will be included in the due diligence process and baselines will be updated prior to contract signature and follow the aforementioned process post contract signature. Atos agrees with the Commonwealth that this type of support and possibly other functions should be measured and billed separately to provide greater transparency and flexibility.</p>
Q37.	Asset	The Commonwealth consumes certain services today which are	Atos is pleased to provide data center as a service

Ref#	Category	Question	Supplier Response
	Ownership	underpinned by a set of assets (servers, firewalls, etc.). The Commonwealth (or their designee) has the right to acquire these assets. The Commonwealth has a desire to consume services; rather than own assets, and envisions Supplier acquiring these assets and using them to provide services back to the commonwealth. Please describe experiences acquiring assets from an incumbent, and also describe your recommend financial treatment of their cost recovery for these assets.	and acquire the Commonwealth's current assets. We will assist VITA in this disentanglement process. Atos went through this exact same scenario in Texas when taking over the account from IBM. We were able to help the State determine appropriate fair market value of the assets and their usability in the program, purchase the correct set, and fold those into ongoing charges. In the case where assets had useable lifecycles, we built them into our run-rate costs and waited until an appropriate refresh cycle to replace them. If the assets were at end of life and were just needed for transition, we created a separate transition one-time charge to cover them (with the option to pay overtime to help the State with any potential cash flow concerns). This allowed the State to have their run-rate costs be pure and free of any unnecessary cost burdens, as well as minimized their cost of disentanglement from their previous provider.
<b>C. Managed Security</b>			
Q38.	Security	The Commonwealth's Managed Security description of services includes all the required scope bundled for a single experienced Security Supplier. Do you see any challenges or issues with this bundled model?	Atos does not see any challenges or issues with this bundled model. We have a comprehensive model in providing cyber security and risk management services. This model provides in-depth Security and GRC consulting, industry leading security solutions and 24x7 managed security services in North America and around the world. For example, Atos has provided comprehensive security services for the Olympics for more than 20 years.
Q39.	Security	Do have any concerns or recommendations regarding how to scale Managed Security Services to organizations of the size and complexity of the Commonwealth?	Atos' recommendation—based on leading practices and standards from authorities such as the U.S. Department of Homeland Security (DHS) and NIST, the national body for cyber security and risk management standards—is an enterprise security program that fosters standards for contributing

Ref#	Category	Question	Supplier Response
			<p>business process management as well as enterprise-wide security and risk management capabilities. For example, organizations that use guidance from NIST special publication 800-65 to develop and standardize an enterprisewide IT Capital Planning and Investment Control (CPIC) repeatable process that incorporates considerations for cyber security costs in the IT budgetary planning process will reduce the risks that emerge when disparate departments do not have a centralized CPIC process to use and security requirements are inconsistent or even omitted from the IT budgetary process.</p> <p>Additionally, NIST guidance in special publications such as 800-36, 800-39, 800-53, and 800-160 enable any enterprise to establish the right controls and centralized process to manage IT acquisition; include the proper level of security functionality; perform risk assessment; and curtail undue risks in your networks, systems, and application before they expose the enterprise to risk and threats that cost 10 to 200 times more to remediate once in the production environment than if they were caught and managed during the planning, designing, or testing phases of an enterprise IT lifecycle.</p> <p>Atos has invested heavily in adopting NIST standards and has created a consulting team of subject matter experts to help you or guide you in realizing a significant ROI by adopting and implementing the NIST Security and Risk standards. We also recommend following our method of managing an Enterprise Security Program (ESP) enhancement effort such as this by following these steps: Initiation, Assessment, Planning, Engineering, Implementation, Verification, and then transition to the Continuous Monitoring and Improvement phase.</p>

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Q40.	Security	Can you provide examples of comparable environments where you offer security services similar to those required by the Commonwealth?	The State of Texas, the Olympic Games, McGraw-Hill Education, and Siemens are some clients where Atos has deployed and managed similar security services.
Q41.	Security	Have you supported Managed Security services in distributed environments - both physical and virtual including on premise and off premise implementations?	<p>Atos has supported managed security services in distributed environments for both public and private sectors with critical infrastructure requirements. An example of a distributed model that Atos supports is Allscripts, a leading provider for EHR, financial management, population health management, and precision medicine solutions.</p> <p>Cybersecurity is one of the Atos key strategic areas and managed security services are an integral part of our offerings. Atos was included in the Gartner Market Share on Managed Security Services, Worldwide in 2015. Gartner ranked Atos in the top five among the world's biggest managed security service providers (MSSPs).</p> <p>Atos is able to provide end-to-end security services ranging from advice, design, build and operate cyber security and risk management services 24x7x365 for our clients on premise or in our world-class Security Operations Center (SOC).</p> <p>To provide our Global Managed Security Services, we have SOCs in Europe and North America, and plans to develop a new SOC in Asia Pacific.</p> <p>At Atos, our Managed Security Services cover the following:</p> <ul style="list-style-type: none"> <li>• Security Information and Event Management (SIEM)</li> <li>• Vulnerability Management Services</li> <li>• Incident Response and CSIRT Handling Services</li> <li>• Identity and Access Management Services</li> </ul>

Ref#	Category	Question	Supplier Response
			<ul style="list-style-type: none"> <li>• Intrusion Detection and Protection Services</li> <li>• Data Loss Prevention (DLP) Services</li> <li>• Endpoint Protection Services</li> </ul>
Q42.	Security	Do you offer solutions supporting geographically diverse locations (e.g., remote location with satellite)?	Yes, please refer to Atos' response to Question 41.
Q43.	Security	How have you implemented solutions similar to those in the Commonwealth making use of a centralized federated environment?	Yes, federation is a key element and the model for many of our MSSP clients. This model has shown it provides the greatest ROI and lowest total cost of ownership (TCO).
Q44.	Security	What do you consider to be the key challenges and tradeoffs for the implementation of Managed Security Services in an environment similar to the Commonwealth?	<p>The key challenges Atos has experienced include the following:</p> <ul style="list-style-type: none"> <li>• The client transitions away from day-to-day operational duties to becoming a MSSP client</li> <li>• The adoption of more mature processes used by a MSSP to manage multiple clients simultaneously</li> <li>• The misperception of losing full control of assets and data that were previously under day-to-day operations; this is handled with reporting and process controls as opposed to hallway meetings</li> <li>• Moving from a CAPEX model to an OPEX model for managed security services</li> <li>• Overcoming the obstacle of sharing information with a MSSP about protected data, system documentation, or the lack thereof</li> <li>• Reading and responding to report volumes or detail levels that were not previously experienced</li> <li>• Learning or experiencing a MSSP solution for real-time GRC capability and dashboards initially</li> </ul>
Q45.	Security	What do you propose at a high level to be the key strategies and	First we propose an assessment and baseline effort,

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		implementation elements of any typical security services solution migration?	<p>followed by planning and reviews prior to execution. This approach ensures proper understanding and designs are in place before transition.</p> <p>Based on industry-leading standards from NIST, Atos recommends an approach such as the Atos method of managing an Enterprise Security Program (ESP) enhancement effort such as this by following these steps: Initiation, Assessment, Planning, Engineering, Implementation, Verification, and then transition to the Continuous Monitoring and Improvement phase.</p>
Q46.	Security	Can you recommend additional Managed Security Services that are not currently included or considered in the scope of described services?	<p>The provided list is comprehensive and addresses all of the areas of critical concern that larger organizations face today. With that said, it's important to remember that security is only as strong as the weakest link in the overall chain. In today's environment this comes down to the individual users of systems and processes. Ongoing testing of the user environment through Security Penetration Testing and social engineering techniques is highly recommended in combination with the maturity of Enterprise-wide Business Processes that enable and include security and risk management capabilities such as Budget, IT Acquisition, a Secure System Design Lifecycle and a Secure Application Development Lifecycle supported by new roles and standards in Risk Assessment, Risk Authorization and Continuous Monitoring processes that promote a culture of security awareness.</p>
Q47.	Security	Based in your experience, what are the key challenges with regard to the regulatory requirements included in the scope of services? Do you have any recommendations based on your experience?	<p>Maintaining a near real-time GRC capability with dashboard or live reporting but our Security and GRC consulting group has spearheaded a project to relief this area of concern.</p> <p>Atos has extensive knowledge and experience with regulatory requirements as cited on the VITA Security</p>

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			<p>website such as FISMA, CJIS, HIPAA, and FTI. For example, the Texas DIR data centers are FISMA- and CJIS-compliant, and are regularly audited.</p> <p>Additionally, all of our employees at all of our public sector accounts undergo Federal background checks in addition to others such as CLETS, State of Georgia, etc.</p> <p>Regulatory requirements can be met with ease by adopting NIST security and risk standards. The decision to adopt industry-leading security and risk management standards from NIST is an easy one. The discipline to plan, engineer, design, implement, integrate, and manage such a diverse and mature set of security and risk management standards is a heavy load to bear alone. Without in-depth expertise and experience in adopting these standards, there is a risk of project failure or lack of acceptance that can be transferred and managed more objectively by an experienced and expert level MSSP and partner.</p>
Q48.	Security	Do you have any guidelines or best practices regarding whether the various Managed Security Services are better off being remotely hosted or on premise?	<p>Overall, with budgets flat and security workforce shortages, Atos can envision greater benefits of using hosted managed security services for any aspect of security in both public and private organizations; however, we can provide on-premise support.</p> <p>Atos can recommend two guides produced by our strategic partners that can assist with this topic:</p> <ol style="list-style-type: none"> <li>1. Cisco: <a href="http://www.cisco.com/c/en/us/products/security/managed-services.html">http://www.cisco.com/c/en/us/products/security/managed-services.html</a></li> <li>2. Digital Guardian: <a href="https://digitalguardian.com/blog/make-vs-buy-cisos-guide-evaluating-managed-security-services">https://digitalguardian.com/blog/make-vs-buy-cisos-guide-evaluating-managed-security-services</a></li> </ol>
Q49.	Security	Do you think you would be able to provide all the described Managed	While Atos has the internal capabilities to deliver all

Ref#	Category	Question	Supplier Response
		Security Services yourselves or will you require to subcontract any services to other third parties?	these offerings, we typically look to bring on a handful of local firms, targeting those that are minority-owned, to help facilitate the transition and steady-state run activities. This is due to the fact that the relationships those individuals have built are priceless for the interaction between all parties, most notably the client's willingness to participate and work with the provider(s) to achieve the highest value for the services they are paying for; plus we believe in giving back and supporting the local communities where we do business
Q50.	Scope Demarcation	VITA is interested in identifying the most efficient demarcation or bundling of these services between RFPs. For example, perhaps it would be more efficient to separate the Data Center facilities from the other Server services; or perhaps it would be better to include some or all of the Security services with the Server RFP. Please provide any further experience or suggestions regarding scope demarcation between potential RFPs.	Atos recommends the following: <ul style="list-style-type: none"> <li>• Data Center serves all towers and should be removed from the other towers to stand alone</li> <li>• Storage and Backup can be included in the individual towers because they are able to stand alone from a technology perspective</li> <li>• Security crosses all towers and should be a separate horizontal</li> <li>• Atos recommends no more than one provider per tower</li> </ul>
<b>D. Financial/Managed Security</b>			
Q51.	Pricing Structure	<p>The Commonwealth is interested in creating the best possible pricing structure for the Services. In light of that fact, Supplier is invited to both comment on the structure described in Exhibit 4.1 and 4.2, and to propose an alternate pricing structure if they believe that it will better serve the interests of both parties.</p> <p>The Commonwealth will contemplate any proposed pricing structure along five dimensions:</p> <ol style="list-style-type: none"> <li>1. <b>Predictable:</b> To the greatest extent possible, customers should be able to forecast charges ahead of time; changes in pricing that occur over time should not be a surprise.</li> </ol>	Typical Managed Services offerings are tiered to provide varying levels of functionality/SLAs (e.g., Gold, Silver, Bronze); tiered service pricing can vary widely depending on several modifiers, including transactional volumes, numbers of devices, and numbers of users. Comparable offerings are consistently priced, assuming the same (or similar) modifiers. Pricing tools for each service specify the modifiers to be taken into consideration. Where appropriate, cost reductions accrue based on volumes; additionally, Atos applies a year-over-year

Ref#	Category	Question	Supplier Response
		<ol style="list-style-type: none"> <li data-bbox="495 212 1247 383">2. <b>Manageable:</b> The pricing should not be so complex that it is needlessly difficult to administer. If quantities of work or equipment in the environment must be measured, then those quantities should be as easy and transparent as possible to measure.</li> <li data-bbox="495 407 1247 578">3. <b>Fair:</b> The service pricing must be a reasonable proxy for a services provider's underlying costs and should adequately recover those costs. Additionally, to the extent possible, the party that causes any incremental cost should bear that cost.</li> <li data-bbox="495 602 1247 805">4. <b>Incentives:</b> All pricing structures will incentivize certain behaviors and discourage others. The goals of the sourcing program must be kept in mind when considering the behaviors that might be driven by a pricing structure. For example, a goal to encourage server consolidation might include reduced cost at a centralized data center.</li> <li data-bbox="495 829 1247 1105">5. <b>Flexible:</b> As consumption moves up and down, the charges should also adjust. Technology is an evolving industry, and the ability to turn down an old service to turn up a new service is one of the benefits of an efficient IT sourcing agreement. Such adjustments may include minor volume changes month to month, significant scope additions, reductions, or terminations, and ability of large service providers to re-deploy investments.</li> </ol>	<p>efficiency factor for multi-year services to all Managed Security Services. Typically, where volumes change during the course of a Managed Security Services contract, Atos works with the client to establish appropriate pricing for the level of services being provided.</p>
Q52.	Inventory and Volume Collection	<p>The Commonwealth is interested in introducing new Resource Units that do not exist in the current contract; in order to fairly compensate Supplier for service delivered, and support the other goals described in question 36, Supplier is asked to describe their experience and approach to collecting and verifying volumes both before and after contract signing, and the approaches they use to adjusting financials in the event that the initial count is incorrect. For example, today database support is provided by the Supplier, but is not separately billable. The Commonwealth sees an advantage to separating out</p>	<p>Atos has worked with clients as they re-invented pricing to meet changing environments and agency goals. In these cases, we collaborate to determine the new RUs to ensure that the RUs are measurable and don't materially change the business case, thereby adversely impacting either party. We would use the same due diligence process to determine volumes.</p> <p>Please refer to our response to Q36 for information</p>

Ref#	Category	Question	Supplier Response
		database support and making it a separate chargeable unit, how would the service provider collect and verify the volumes to support this chargeable unit?	on collecting data before and after the contract signing.
Q53.	Asset Ownership	The Commonwealth consumes certain services today which are underpinned by a set of assets (servers, firewalls, etc.). The Commonwealth (or their designee) has the right to acquire these assets. The Commonwealth has a desire to consume services; rather than own assets, and envisions Supplier acquiring these assets and using them to provide services back to the commonwealth. Please describe experiences acquiring assets from an incumbent, and also describe your recommend financial treatment of their cost recovery for these assets.	Atos is pleased to provide data center as a service and acquire the Commonwealth's current assets. We will assist VITA in what unfortunately can be a difficult disentanglement process. Atos went through this exact same scenario in Texas when taking over the account from IBM. We were able to help the State determine appropriate fair market value of the assets and their usability in the program, purchase the correct set, and fold those into ongoing charges. In the case where assets had useable lifecycles, we built them into our run-rate costs and waited until an appropriate refresh cycle to replace them. If the assets were at end of life and were just needed for transition, we created a separate transition one-time charge to cover them (with the option to pay over time to help the State with any potential cash flow concerns). This allowed the State to have their run-rate costs be pure and free of any unnecessary cost burdens, as well as minimized their cost of disentanglement from their previous provider.

## 6. FEEDBACK REGARDING RFI DOCUMENTS

Please use the table below to provide commentary regarding specific documents included within this RFI, adding rows as necessary.

Ref#	Document/Section	Supplier Commentary
C1.		Please refer to Atos' Executive Summary below for additional information regarding our RFI response as well as our market-leading public sector managed service practice.

Atos is pleased to submit our response to the Request for Information (RFI) 2017-14 issued by Virginia Information Technologies Agency (VITA) for: Server, Data Center, and Security Services. Because of our significant experience with outsourcing IT environments for similar organizations, we understand the unique challenge this RFP initiative brings to VITA. Atos looks forward to working with your teams to provide a service that will enable your organization to focus on your mission and core values, while we provide seamless and efficient IT services that add value and enable you achieve your stated objectives to accomplish the following:

- **Maintain and improve service quality**
- **Ensure cost competitiveness – both now and in the future**
- **Create a platform view of service delivery that is highly visible and accountable**

Atos specializes and excels in managing and transforming state, city and county government IT environments, and we experientially understand the unique challenges that face State governments. Atos believes that technology serves as a foundation for great customer service and a productive work place. Additionally, with our core competency and experience in government IT services for State government, we know what it costs and what it should cost the State to deliver the services needed today, and in the future, while continuously improving and innovating to bring business-enabling enhancements for your users and the citizens of Virginia.

We consider VITA to be a perfect cultural fit for a long-term strategic partnership with Atos and are highly motivated to bring this partnership to fruition. Our aspirations not only include a "Service Beyond Reason" approach to the scope requested in the RFI, but also includes providing a level of strategy and transformation that is truly unique in the marketplace today. Atos specializes and excels in managing and transforming the IT operations of its clients. This includes managing clients' entire information and data processing systems covering data centers, network and desktop support operations, application management, and implementing processes and tooling that enable clients to benefit from our innovative technologies. We provide a comprehensive infrastructure support model and have unrivaled experience in major rollout programs covering complex and multi-site, multi-agency solutions similar to VITA.

Atos has extensive experience and brings a unique level of capability in delivering for public sector clients all over the world. From serving our legacy U.S. local government accounts such as the State of Texas, the City of Indianapolis, the City of San Diego and others, to developing and deploying the world's most secure government ID management scheme in the UK, we support a broad range of public sector clients and provide a plethora of unique mission-critical services.

We take the following core principles into every account:

- ▶ **Thinking together**, by developing tactical plans based on your strategic needs
- ▶ **Planning together**, by creating longer-term strategic programs that leverage our innovative technologies, processes, management concepts, and contracts to enable broad-scale change
- ▶ **Acting together** and delivering on any scale with total peace of mind, just as we do today in managing all of the IT for the Olympic Games
- ▶ **Mobilizing together**, by not only unlocking the power of a global organization, but through our proven ability to bring these resources to bear to collaborate with you to impact change at the local level

## A. Our Commitment to Government and Solving Government Challenges

With more than \$14 billion in annual revenue, Atos provides IT services across the spectrum of technology with a **company focus and as a leader in the public sector** demonstrated by the following highlights:

- ▶ 11,000 business technologists focused on delivering public sector projects and solutions
- ▶ More than 22 percent of total revenues coming from work for central, regional, and local governments
- ▶ 40 years of experience of designing and delivering public sector projects
- ▶ Experience in developing and supporting comprehensive hosting solutions for government entities with proven government solutions deployed in a number of state, county and city environments, including a government hub in Texas

Atos also understands the pressures for states to grow and develop, and ensure a great quality of life for citizens while becoming as efficient and modern as possible. This requires a new partnership among citizens, government, and business—and new technology-driven services that ensure seamless, safe, productive, and rewarding ways to live and work. Atos has vast experience in supporting governments move from traditional to modern (bi-modal) government services through technology and will use that experience to bring such services and capabilities to the Commonwealth.

The following graphic illustrates the breadth and depth of our public sector experience in North America:



Figure 1. Atos' North America Public Sector Accounts.

Atos' ambition is to drive leadership and digital transformation in the Managed Services domain—bringing to market innovative offerings and leading the industry in data center, security, cloud, and related services. We're focused on business technology that powers progress and helps organizations create their vision of the future. From a corporate perspective, our overall vision is aimed at delivering IT products and services that anticipate and align with our clients' evolving requirements, emerging opportunities, and challenges. To achieve this goal, our core strategy is to leverage and reinforce our strengths to capture profitable growth across the markets we serve.

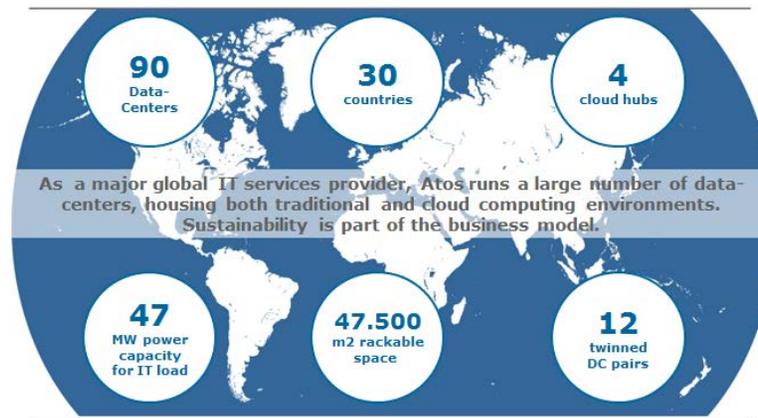
Our proven track record in customer satisfaction is based on our governance approach. We will work with VITA to establish a collaborative governance team, which will oversee the activities associated with the outsourcing contract. This team is responsible for ensuring the overall effectiveness of the governance processes and communicating with stakeholders. Atos will work closely with VITA to establish a governance structure and organization to accomplish the following:

- ▶ Ensure business alignment between VITA and Atos
- ▶ Develop strategic requirements and plans associated with the services and any new services
- ▶ Approve Atos reports and recommendations, including review and/or approval of the following:
  - Transition/transformation plans and implementations, including progress and achievement of critical deliverables and key activities
  - Service level reports and modifications
  - Continuous improvement and quality assurance measures
  - Changes to critical and non-critical service levels
  - Financial issues and performance
  - Resolving issues escalated by management

### A.1. Our Commitment to Data Center Services

Our world-class data centers are designed with state-of-the-art hardware, networking, and software. Our facilities are built and operated in accordance with the ITIL ISO/IEC 20000 standard, which is the recognized global standard for data center operations. Our Enterprise Command Centers (ECCs) in the U.S., India, UK, and Germany have the capacity and capability to seamlessly assume a client's IT operations, including security, data storage, network services, and voice and data support. Atos' security services and security operations are integrated into Atos data centers, conforming to our clients' security policies.

Atos can provide data centers as required by VITA and is committed to being a leader in environmentally responsible data center services. This strategy is at the heart of Atos data center roadmap, and Atos has been recognized as a leader in the IT sector.



**Figure 2.** This figure illustrates Atos' depth and breadth in the IT outsourcing industry.

Atos can provide end-to-end operational support for VITA's data center compute infrastructure platforms. Our standard monitoring and management tools will be deployed with integration to our Atos Technology Framework (ATF) set of tools to handle incidents, problems, and changes. The following list provides an example of the services we provide in our data center solutions:

- ▶ Monitoring, alerting, and notification of server issues, incidents, and outages
- ▶ Managing and maintaining server platform operating systems, drivers, and firmware
- ▶ Providing critical and non-critical patch management
- ▶ Managing file servers and associated folders and shares, including creation and permissions management
- ▶ Maintaining server management and reporting systems
- ▶ Providing hardware and software asset tracking and utilization services
- ▶ Managing and maintaining file and print servers
- ▶ Managing and maintaining Windows Active Directory domain environments
- ▶ Managing and maintaining Citrix environments
- ▶ Manage and maintain end-user support for all messaging platforms

- ▶ Providing troubleshooting and remediation services for all platforms
- ▶ Managing and maintaining user identity and access management systems and user databases such as LDAP and Active Directory
- ▶ Managing and maintaining Linux servers
- ▶ Managing and maintaining IBM iSeries servers

The Atos implementation of a data center solution typically includes the following elements:

- ▶ Transferring operational knowledge to Atos support staff
- ▶ Implementing Atos standard tools and incorporating the client's existing tools as needed
- ▶ Standardizing operational and systems support processes and procedures
- ▶ Assuming complete support of the environment, including 24x7x365 monitoring
- ▶ Measuring service levels and performance
- ▶ Developing hardware and software roadmaps
- ▶ Demonstrating continuous process improvement

Atos' data center services will provide support to VITA, along with active management of the infrastructure environment. We keep service management tools up-to-date, and will advise VITA on hardware replacements and the deployment of new features when released.

## **A.2. Our Commitment to Data Storage and Backup Services**

Atos' data storage and backup services focus on the backup of media systems and libraries, including incident resolution, daily operations, security, and the tooling required to execute those activities. Atos will perform managed operations for VITA's backup environment consisting of library management, media management, tooling, network interface(s), and fiber channel interface(s) to the attached peripheral equipment. Atos will use our ATF set of tools to handle incidents, problems, and changes. Atos executes daily operations and monitoring for the backup management service environment.

Our solutions are specifically designed to meet client requirements and will provide VITA with highly efficient and effective management of backup and restore environments, including the following:

- ▶ Performing data backups and restores according to established VITA policies and procedures
- ▶ Providing backup reporting as defined by VITA, leveraging existing tools, processes, and procedures
- ▶ Configuration and management of backup application
- ▶ Configuration and management of backup clients
- ▶ Management and monitoring of backup queues/jobs
- ▶ Management and monitoring of backup infrastructure (i.e., master/media servers, libraries)
- ▶ Restoration of data, as requested
- ▶ Management of requests for data backup and restore requests, including legal hold process and procedures
- ▶ Management of critical and non-critical patches
- ▶ Providing hardware and software asset tracking and utilization services

Atos' managed application storage services focus on SAN systems and switches, along with activities related to the storage hardware platform, including incident resolution, daily operations, security, and the tooling required to execute these activities. We will perform the activities related to the management of VITA's storage services, including necessary transition activities to ensure a smooth knowledge transfer of the storage management activities to Atos.

Our managed operations services for the storage environment comprise SAN logical unit management and SAN switch management, management tooling, network interface(s), and fiber channel interface(s) to the attached peripheral equipment. Atos will use our ATF set of tools to handle incidents, problems, and changes. Atos executes daily operations and monitoring for the storage management service environment, including the following:

- ▶ Monitoring, alerting, and notification of storage issues, incidents, and outages
- ▶ Managing and maintaining storage platform operating systems, drivers, and firmware
- ▶ Managing data center storage servers, applications, and systems associated
- ▶ Managing critical and non-critical patches
- ▶ Managing file servers and associated folders and shares, including creation and permissions management
- ▶ Maintaining storage management and reporting systems
- ▶ Providing hardware and software asset tracking and utilization services
- ▶ Providing troubleshooting and remediation services for all storage platforms

### **A.3. Our Commitment to Security and Regulatory Compliance**

Atos has its own security organization with a framework of policies, standards, roles and guidelines. Our IT services sites are regularly inspected by our team of security advisors, who are qualified ISO 27001 internal auditors and have extensive experience in implementing and assessing physical security controls. We're certified under the ISO 20000 Certification process, and the effectiveness of Atos security controls is verifiably documented within an annual SSAE16 report and regularly measured as part of the Atos ISO27001 certification. We will provide audit reports if requested.

Atos adheres to best industry practices for user security, system security, network security, and physical security. Atos also has been a worldwide early adopter and long-time promoter of best practices, including International Organization for Standardization (ISO) and other proven guidelines for quality IT service management:

- ▶ **ISO 9001:2008**—Atos has been awarded an ISO 9001:2008 certificate for IT-Services and Business Process Outsourcing worldwide.
- ▶ **ISO/IEC 20000-1:2005**—Atos has implemented and maintains an IT Service Management System.
- ▶ **ISO/IEC 27001:2005**—Atos has implemented and maintains an Information Security Management System.
- ▶ **ISO 14001**—Atos has been awarded an ISO 14001 certificate throughout the entire company. We created a global team that's responsible for reporting Atos' sustainability achievements in line with the Global Reporting Initiative (GRI), the world's de facto standard in sustainability reporting, created in 1997 in partnership with United Nations, and today used by all best-in-class companies.
- ▶ **SAS 70/SOX - Type 1 and 2**—Atos has implemented a control framework to compile SAS 70 auditing statements for meeting regulations as laid down in the Sarbanes-Oxley (SOX) Act of 2002, for its own organization as well as to support its customers. The SAS 70 auditing standard is used by service auditors to assess the internal controls of a service organization. The final version of a SAS70 auditing statement is submitted to customers if contractually agreed, enabling customers to assess the validity of Atos' internal controls.

- ▶ **CMMI and IT Service CMM Level 3**—Atos has an active program for certification of its business to the Capability Maturity Model Integration (CMMI) level 3. Atos has development centers in France, Netherlands, and Spain, and offshore development centers in India, China, and Brazil all appraised at CMMI level 3.

To provide a highly secure environment for our clients, Atos provides a comprehensive set of services designed to effectively manage security controls, protect data at rest and in motion, and assure coordination between VITA and Atos team members, including services such as:

- ▶ Network intrusion detection and prevention
- ▶ Monthly vulnerability scanning
- ▶ Anti-virus/anti-malware
- ▶ Transition and annual risk assessment
- ▶ Annual external penetration test
- ▶ Annual audit support

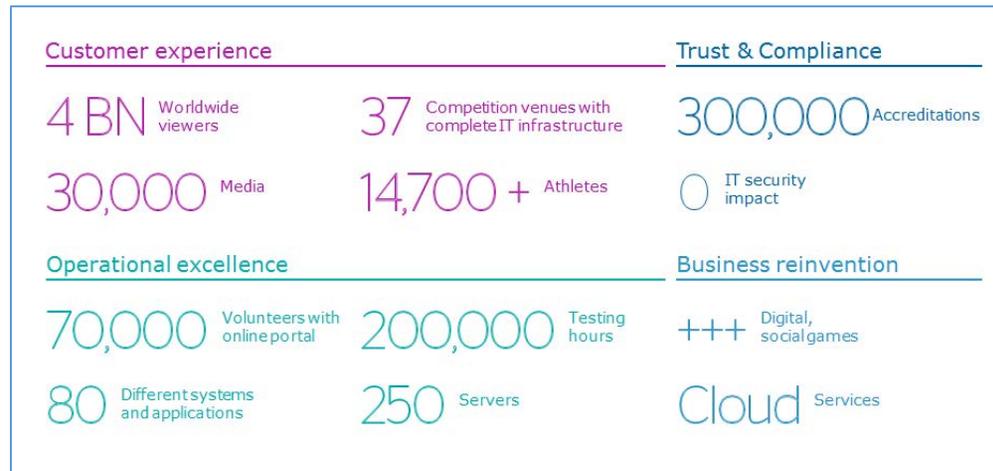
#### 6.A.3.1.1 Regulatory Compliance

Atos has implemented and maintains an Information Security Management System (ISO/IEC 27001) and has implemented a control framework to compile an SSAE 16 auditing report for meeting regulations as laid down in the Sarbanes-Oxley (SOX) Act of 2002 for our own organization and to support our clients. The SSAE 16 auditing standard is used by service auditors to assess the internal controls of a service organization location. The final version of an SSAE 16 auditing report can be submitted to a client, if contractually agreed, enabling a client to assess the validity of Atos' internal controls. Other professional security certifications include CompTIA Security+ for access control, identity management, and other security, Systems Security Certified Practitioner, and others.

## B. Our Commitment to IT Leadership

### B.1. The Olympic Games

Atos has been a key technology provider for the Olympic movement since 1989, when the company provided services to the Barcelona 1992 Organizing Committee. Our experiences at the Olympics are leveraged and implemented with our clients. As an example, Atos has handled more than 200 IT security events per second with zero impact, and we incorporated this expertise into the solutions we deliver to our clients.



**Figure 3.** The Olympic Games: Equivalent to a business of 200,000 employees, serving 4 billion customers, operating 24/7, in a new territory, every 2 years

Although invisible to most people, the IT provided by Atos plays an essential role in making the Games a success. Atos provides the systems that beam the results around the world in less than a second for use on television, online, and on multiple devices; the portal to support the recruitment and training of 70,000 volunteers; and the solution that processes 300,000 accreditation passes so those involved in the Games can access the areas they need during the Games as well as providing those in the Olympic Family (athletes, sports officials, media, and TOP Partners) travelling from overseas with a visa to enter the host country. Atos has a strong track record with the Olympics Games, resulting in a digital transformation unsurpassed in any industry. It's one of the only businesses on the planet that has a full business life cycle, where it starts, runs, and then ends, and has to restart when the next Olympics take place.

### C. Our Commitment to “Service Beyond Reason”

Atos' foremost objective is to ensure **we exceed your expectations**. Every Atos employee is 100 percent committed and passionate about meeting our corporate objective of providing the best level of service in the IT marketplace today. Our aspirations include a **“Service Beyond Reason”** approach to the scope requested in the RFI and providing a level of strategy and transformation that is truly unique.

With **one of the highest contract renewal rates in the industry**, Atos lives and breathes a **“Client for Life”** approach for our clients. As a matter of fact, we only bid on opportunities where we believe the scale, expertise, and cultural fit are mutually beneficial in the immediate and over the long term. This approach to focusing our new relationships enables us to invest a great deal of management effort in implementing and sustaining new client initiatives, and has served Atos and our clients well over the years.

We have **numerous examples of** going above and beyond (**“Service Beyond Reason”**) and can provide many references. Being the **best in providing public sector services** to states, cities, and counties, no other company has the experience, capabilities, and happy clients like Atos...we are **bringing our best to you**. We look forward to meeting with you and working together to ensure the Commonwealth's ongoing success.