



Testimony of

Paul Misener, Vice President for Global Public Policy, Amazon.com

At the Hearing

**“Time to Reform Information Technology Acquisition:
The Federal IT Acquisition Reform Act”**

**Before the Committee on Oversight and Government Reform
United States House of Representatives**

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Good morning, Chairman Issa, Ranking Member Cummings, and Members of the Committee, my name is Paul Misener, and I am Amazon.com’s Vice President for Global Public Policy. On behalf of Amazon and our customers, thank you very much for inviting me to testify today on the reforms proposed in the draft Federal Information Technology Acquisition Act (FITARA) legislation.

Amazon Web Services

Amazon.com opened on the World Wide Web in July 1995 and today offers Earth’s Biggest Selection. Amazon seeks to be Earth’s most customer-centric company, where customers can find and discover anything they might want to buy online, and endeavors to offer its customers the lowest possible prices and the best possible services. Technology innovation has always driven Amazon’s growth. As we expanded our offerings for retail customers, we also expanded customer segments.

After over a decade of building and running the highly scalable web application known as Amazon.com, the company realized that it had developed a core competency in operating massive scale technology infrastructure and datacenters, and embarked on a much broader mission of serving a new customer segment – including businesses and government agencies – with a platform of web services through our cloud computing business called Amazon Web Services (AWS).

In 2006, AWS began offering developer customers access to in-the-cloud infrastructure services based on Amazon's own back-end technology platform. Previously, businesses and government agencies only had the option of either making massive capital investments to build their own infrastructure or of contracting with a vendor for a fixed amount of datacenter capacity that they might or might not use. This choice meant either paying for wasted capacity or worrying about shortages, *i.e.*, that the capacity they forecasted was insufficient to keep pace with their growth. Businesses and government agencies spent a lot of time and money managing their own datacenters and co-location facilities, which meant time not spent on their core organizational missions of providing products and services for their customers and citizens. In large part, these inefficiencies continue today.

AWS is passionately committed to sharing the benefits we can achieve as a global cloud provider, and our economies of scale have resulted in the rapid innovation of public cloud services and the lowering of pricing for our customers. Specifically, we have lowered our cloud service prices more than 25 times.

Today, AWS provides a highly reliable, scalable, secure, and low-cost infrastructure platform in the cloud that powers hundreds of thousands of enterprise, government, education, and startup organizations in 190 countries around the world. Customers include fast-growing companies such as Pinterest, other private organizations including NASDAQ, and over 300 government agencies including the U.S. National Institutes of Health, U.S. Department of Energy, U.S. Department of the Treasury, NASA's Jet Propulsion Laboratory, and the U.S. Army, Navy, Air Force, and Marine Corps. AWS also offers its dedicated GovCloud Region to U.S. government agencies and customers, allowing them to move more sensitive workloads into the cloud by addressing their specific compliance requirements, such as the Federal Information Security and Management Act (FISMA) or International Traffic in Arms Regulations (ITAR).

Notably, Amazon.com, as the largest online retailer in the world, has itself adopted cloud computing services provided by AWS to enable rapid innovation and growth, to transform how we deliver our services to customers, and to lower our IT costs substantially. That is, Amazon's core retail business relies on cloud services provided by AWS. We firmly believe in cloud computing.

Cloud Computing

One way to think about cloud computing is that instead of buying, owning, and maintaining their own datacenters or servers, government agencies, businesses, and developers can acquire technology resources such as compute power and storage on an as-needed basis, and dispose of it when it no longer is needed. Users only pay for what they use – by the hour or gigabyte – and they are not locked into long-term contracts.

This approach to computing allows dynamic growth and shrinkage of resources to match real demand, as opposed to buying more than needed initially (*i.e.*, waste) and then taking the risk of still not having enough capacity for peak loads (*i.e.*, shortage). The cloud provider manages and maintains the technology infrastructure in a more consistently secure environment, while users simply interact with resources they need via the Internet or dedicated connections.

The benefits of cloud computing have been described before to your Committee. Please allow me to summarize briefly those benefits to users, including government agencies:

- First, with cloud, IT users can trade capital expenditures for variable expenses. That is, users can pay only for what IT they actually consume, and only when they consume it.
- Second, with cloud, those variable expenses are lower than they would be if the user self-provided the IT service. With inherent economies of scale, the large-scale commercial cloud is simply more efficient than anything a particular user could build and operate for itself.

- Third, users don't need to guess their capacity needs. Before cloud, users risked the waste of buying too much IT capacity if demand were lower than guessed, or they risked dissatisfaction of their customers or citizens with shortages, if the users bought insufficient IT capacity to meet demand.
- Fourth, the speed and agility of user innovation is dramatically increased with cloud. Instead of waiting many weeks to obtain IT infrastructure, virtually unlimited capacity is available to users within minutes.
- Fifth, cloud computing allows a user's scarce technical talent to focus on its core mission, not on maintaining basic compute and storage infrastructure to support it. With the budget challenges that agencies face today, that focus is valuable now more than ever to government users.

Federal IT Acquisition and FITARA

Cloud users who enjoy these benefits include federal government users. Agencies can pay only for the IT they actually consume, and pay less for what they do. Departments don't need to guess their capacity needs, and can quickly scale up and down as needs arise or abate. And, rather than maintaining data center infrastructure, technical talent can focus on specialized government functions and services that can be offered nationwide or globally in an instant.

Amazon.com supports federal IT acquisition reform. As you and others have pointed out, Mr. Chairman, the way government defines its requirements and acquires IT can be considered antiquated. Given the benefits I have just described, Amazon believes that a principal aim of federal IT acquisition reform legislation should be to facilitate federal government acquisition of cloud computing services.

Amazon also generally supports the aims of the FITARA draft released last fall. The U.S. Federal Chief Information Officer (CIO) Steven VanRoekel told this Committee on January 22, 2013, "[t]hrough the advent of cloud computing, the IT community now has a scalable and transparent way to purchase and provide services, enabling agencies to transform how the organization leverages technology by pivoting away from the old model of buying IT as an asset." We could not agree more, and we believe that FITARA could help the federal government achieve this result.

Although we are not expert in several of the areas covered by the FITARA draft and, thus, have little or no opinion on these areas, we do know about cloud computing and serving public sector customers, so here we offer our views on where the draft excels with respect to cloud computing, and where we believe it could be improved.

Title I

Title I of the FITARA draft would give federal agency CIOs more authority and budget flexibility. Amazon supports this idea and believes it would lead to the adoption of more efficient solutions, including cloud computing, to the challenges faced by federal agencies.

The TechAmerica Cloud Commission reached the same conclusion in 2011, recommending that “[a]gencies should demonstrate flexibility in adapting procurement models to acquire cloud services and solutions. Congress and OMB should demonstrate flexibility in changing budget models to help agencies acquire cloud services and solutions.” (“Cloud First, Cloud Fast: Recommendations for Innovation, Leadership and Job Creation,” TechAmerica Foundation, 2011.) Also, the Software & Information Industry Association (SIIA) specifically recommended in a 2012 White Paper that “OMB [the Office of Management and Budget] and GSA [the General Services Administration] should work together and with industry to review and recommend changes to capital planning and procurement regulations that might hinder the rapid acquisition of innovative technologies by government.” (“Beyond the 25 Point Plan: A Roadmap to Implementing Cloud Computing and Reforming Federal IT,” Software & Information Industry Association, 2012.)

One area where CIOs should be given more authority and flexibility is with respect to spending models, specifically capital expenditures (CAPEX) versus operating expenditures (OPEX). In recent testimony on federal IT acquisition reform before this Committee, former Congressman Tom Davis suggested that it “would be better to break things into smaller chunks and make sure they work before going to other steps.” We agree. But this can only be successful if agencies are empowered to shift from the CAPEX budget model to OPEX when it makes sense based on agency CIO priorities.

Given that much IT hardware and software has only a three-year lifecycle, we believe that agencies should be allowed to place capital funds into a “cloud services fund” that preserves the funding for the agency to pay in two or three years for cloud computing services contracted today. The current “use or lose” approach is a disincentive to saving money. Agencies should shift to paying only for what they use, versus spending to stockpile servers, software, etc., because their budgets expire at the end of a fiscal year. As SIIA stated in its 2012 White Paper: “Cloud computing drives agencies away from purchasing IT in a way that requires capital expenditures and overhead, and toward an ‘on demand’ IT model that purchases IT services as it consumes them. Capital planning guidance must keep pace with this changing dynamic.” We agree and believe that FITARA could accelerate this change.

In addition, to make faster progress now, we encourage this Committee to work with the Appropriations Committee and OMB to establish more flexible budget models for acquiring IT solutions. OMB and GAO previously have highlighted the need for Congress to work this way with OMB, including in the “25 Point Plan” released in late 2010 by the U.S. Federal CIO and in recent GAO testimony before this Committee. (See “25 Point Implementation Plan To Reform Federal Information Technology Management,” U.S. Chief Information Officer, December 9, 2010, and “OMB and Agencies Need to Fully Implement Major Initiatives to Save Billions of Dollars,” Statement of David A. Powner, Director of Information Technology Management Issues, GAO, January 22, 2013.)

Title II

Title II of the draft, regarding “Elimination of Duplication and Waste in Information Technology Acquisition,” is a crucial part of the legislation. This title already is strong, but it should be strengthened to help federal agencies provide government services more efficiently.

In Section 203, we recommend including a direct link between the required plan for implementation of the Federal Data Center Optimization Initiative and OMB’s Cloud First policy. Data center consolidation

is fundamentally about improving efficiency and, thus, should not just be about the reduction of the number of federal data centers. FITARA should explicitly reference the goal of greater efficiency and clarify that using commercial cloud services is an equally valid if not preferred way to comply with the data center consolidation mandates, because commercial service providers can make available more compute power and storage for a fraction of the cost based on what agencies actually use. Put another way, data center consolidation is a good start, but cloud computing fundamentally changes both the process and the output, thereby optimizing how government operates IT.

In Section 204, we support adding "cloud computing services" to the Efficient Information Technology provisions. Clearly, for the reasons described before, inclusion of cloud services is warranted.

And, in Section 214, "Transition to Cloud," Amazon generally supports the provision that notes the "significant potential benefits" offered by cloud computing. That provision recognizes, as a Sense of Congress, the overall importance of cloud to federal IT acquisition reform. However, without further policies in the bill encouraging the use of cloud, *e.g.*, implementation of changes to the budget and acquisition process (and specific deliverables and clear benchmarks to measure progress), the benefits (including cost savings) of cloud computing may not be fully realized by the federal government as soon as they could be. We believe that Section 214 should be strengthened by directing federal agencies to continually assess what workloads and applications can be moved to cloud service providers as well as when they can be moved. In addition, the security control language in Section 214 should be strengthened by adding more emphasis on evolving industry standards and best practices.

Another challenge to cloud service providers and IT transformation is the inconsistency of security requirements and processes among federal agencies. We believe the FedRAMP program is positioned to help address this challenge over the long-term, but only if it can be further streamlined, including the period of time that it takes to accredit applications and services. Section 214's call for the adoption of a "Government-wide program providing for a standardized approach to security assessment, authorization and continuous monitoring for cloud services and products" should help advance that effort and ensure that federal agencies leverage FedRAMP and not add agency-specific requirements or audits on top of FedRAMP certification and controls. Such agency-specific requirements and audits are at odds with the efficiencies and economies of scale provided by utility computing platforms.

Title III

In support of OMB's Cloud First policy, Section 301 should be strengthened by adding language about the Federal Commodity IT Acquisition Center that would require the Center to develop expertise in the acquisition and use of commercial cloud computing services. The Committee may want to consider adding similar language in Section 311.

We support the development of Assisted Acquisition Centers of Excellence under Section 302. We believe that these Centers could be well positioned to examine and incorporate innovative approaches, including those that are being adopted in the private sector. One example of this is how organizations are leveraging pay-as-you-go utility price models to acquire and deploy cloud computing services. This acquisition model is enjoying success by early government agency adopters of cloud, such as NASA's Jet Propulsion Laboratory.

Conclusion

In closing, Mr. Chairman, I would like to thank this Committee for working with the IT industry and other stakeholders as this legislation is developed and formally introduced. Amazon believes that the federal government, on behalf of the people it serves, would benefit greatly from expanded use of cloud computing. With FITARA, our nation has an opportunity to eliminate duplication and waste, but also, with the changes we have suggested today, to accelerate the adoption of technologies and practices that transform how the government performs its functions. We look forward to continuing to work with you and your committee.

Thank you again for inviting me to testify today. I look forward to your questions.

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Paul Misener

Paul Misener is Amazon.com's Vice President for Global Public Policy, and has served in this position for 13 years.

Both an engineer (B.S., Electrical Engineering and Computer Science, Princeton University, 1985) and lawyer (J.D., George Mason University, 1993; Distinguished Alumni Award, 2001), he is responsible for formulating and representing the company's public policy positions worldwide, as well as for managing policy specialists in Asia, Europe, and the Americas.

Formerly a partner in the law firm of Wiley, Rein & Fielding, Paul also served as Senior Legal Advisor to a Commissioner of the U.S. Federal Communications Commission. Prior to this government service, he was Intel Corporation's Manager of Telecommunications and Computer Technology Policy, and leader of the computer industry's Internet Access Coalition.

In the late 1980s, Paul was a policy specialist for the U.S. Department of Commerce's National Telecommunications and Information Administration, where he was a U.S. delegate to several conferences of the International Telecommunication Union. Prior to that, he designed radio communications systems.

**Committee on Oversight and Government Reform
Witness Disclosure Requirement – “Truth in Testimony”
Required by House Rule XI, Clause 2(g)(5)**

Name: **Paul Misener**

1. Please list any federal grants or contracts (including subgrants or subcontracts) you have received since October 1, 2010. Include the source and amount of each grant or contract.

None.

2. Please list any entity you are testifying on behalf of and briefly describe your relationship with these entities.

I am testifying on behalf of Amazon.com, Inc. and its wholly owned subsidiary, Amazon Web Services, Inc. I am the Vice President of Global Public Policy for Amazon.com, Inc.

3. Please list any federal grants or contracts (including subgrants or subcontracts) received since October 1, 2010, by the entity(ies) you listed above. Include the source and amount of each grant or contract.

Amazon Web Services, Inc. (“AWS”) provides commercial cloud services to numerous federal customers through various direct and indirect channels. AWS’ commercial cloud services are offered by value added resellers to various federal government customers under GSA IT Schedule 70 contracts as follows:

Reseller	GSA IT Schedule 70 Contract Number
Apptis, Inc.	GS-35F-0586V
Aquilent, Inc.	GS-35F-4729G
DLT Solutions, LLC	GS-35F-4543G
GTSI Corp.	GS-35F-0290X

AWS’ commercial cloud services are also offered by numerous AWS Partners to various federal government customers under other Government Wide Acquisition contracts and Agency ID/IQ contracts such as: NASA SEWP IV, NIH ECS 3, NIH CIO-SP3, Navy Seaport-e and the GSA IaaS BPA.

I certify that the above information is true and correct.

Signature: 

Date: **February 25, 2013**