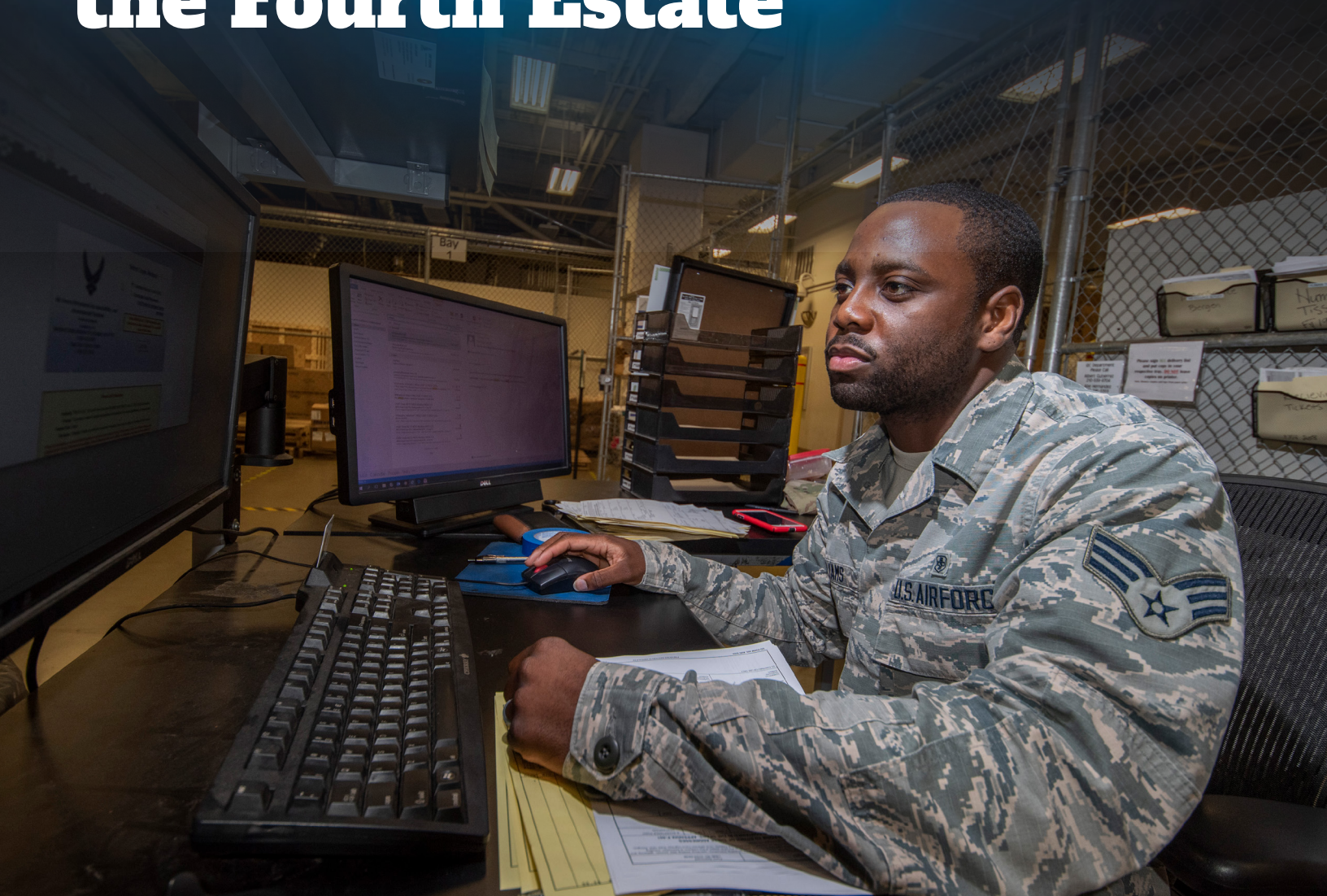


SPOTLIGHT:

Defense Enclave Services: The Benefits of IT Standardization for the Fourth Estate



DEFENSE ENCLAVE SERVICES:

The Benefits of IT Standardization for the Fourth Estate

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A huge cloud-computing program worth \$11.7 billion, the Defense Enclave Services (DES) contract will help modernize agencies and relieve them of IT burden so they can focus on the collaborative mission.



DoD organizations like the Defense Health Agency are securing and standardizing networks under Defense Enclave Services.

The DES cloud-computing contract is typically viewed as an efficiency program that will standardize IT processes and create more cost-effective help desks. A less discussed benefit, however, is that DES will free up resources that can be used by joint forces to prosecute the Great Power competition against China and Russia.

“Early in its maturity, the concept of enterprise IT resulted in individual IT environments that met each organization’s needs,” said John Sherman, principal deputy to the Department of Defense (DoD) chief information officer, speaking at AFCEA’s recent virtual TechNet conference. “Today’s challenges are characterized by peer and near-peer competitors, growing cyber threats, and the imperative that we maximize finite resources.

These require us to implement a digital enterprise that maintains pace with commercial innovation, improves our cybersecurity posture, delivers it efficiently, and most importantly allows the department to fight and defend as a true joint force.”

DES is a DoD cloud-computing program intended to bring enterprise email, voice, video, collaboration, and better cybersecurity to the Pentagon’s so-called “Fourth Estate” – the DoD agencies and departments not directly part of the individual military services or intelligence agencies. There are 22 of these organizations ranging from the Office of the Secretary of Defense to the Defense Health Agency, Defense Logistics Agency and Missile Defense Agency.

DES is part of the DoD Digital Modernization Strategy, along with the Joint Artificial Intelligence Center and the Joint Enterprise Defense Infrastructure (JEDI) cloud program. Worth more than JEDI, the \$11.7 billion DES contract calls for a single winner-take-all award (plus a small business set aside). The Defense Information Systems Agency (DISA) will manage it under the Fourth Estate Network Optimization (4ENO) initiative.

“This is an incredibly important endeavor that we are embarking on,” said Danielle Metz, DISA’s acting deputy CIO for information enterprise, answering media questions at the agency’s annual Forecast to Industry in December. “It is one of the crown jewels as far as our IT reform initiatives.

“Both DES and JEDI complement each other by improving networks, which is what DES is focused on, which will enable better access to cloud services, which is what JEDI was going after.”

If there is a part of the DoD ripe for standardization and better security, it is the Fourth Estate. A joint DoD CIO/DISA review of Defense Agencies and Field Activities (DAFA) revealed eye-opening inefficiencies. Each DAFA operates its own unclassified/classified networks, as well as service desks. The DAFA IT ecosystem spans across 850 unique sites requiring more than 1,000 civilian personnel and 600 IT contracts to operate and maintain the networks and service desks of this ecosystem. The assessment also showed that organizations whose primary missions were contracting, health, human resources, logistics, and financial services, to name several, were dedicating a significant portion of their resources to IT.

“Even with this investment, the DAFAs were unable to keep pace with technological advancement and industry best practices due to prioritization of limited resources that necessarily and properly go towards mission requirements,” said Sherman. “This forced many DAFAs to maintain their own networks and the department’s digital enterprise in a less than optimal security posture.”

NOT JUST STANDARDIZATION, BUT INNOVATION

Though DES is not considered a warfighting platform like JEDI, it can still be looked at as a driver for innovation as it introduces standardized applications, commercial innovation, and efficiency tools.

“There is a clear need for what DES plans to accomplish: common-use IT on a consolidated network with a single provider that leads to lower cost and less risk,” said Navy Vice Admiral (Ret.) Ted Branch, former deputy chief of naval operations for information warfare and leader of the Navy/Marine Corps intranet program at Perspecta.



Ted Branch, leader of the Navy Marine Corps intranet program at Perspecta.

“Finding the balance between standardization and innovation is key. Given the current state of the environment, providing all the intended functionality with one provider is in itself innovative. Getting there will take new thinking and specific technologies along with standardized applications and tools. The end result will be a digital workplace with a consumer-like experience in a secure environment,” said Branch, noting that DES will remove the burden of help desk support and other time-draining activities from Fourth Estate agencies so they can devote their resources to mission execution.

There are three lines of effort associated with DES: common use IT consolidation; strengthening of cybersecurity; and use of a single service provider.

- **Common Use IT Consolidation:** DES will decrease the number of isolated networking enclaves and duplicative environments. It also will optimize and integrate IT management tools, and improve contract management by decreasing duplicative efforts and costs. Furthermore, it will transition globally dispersed and diverse service desks to a common, standardized service support environment.
- **Strengthen Cybersecurity:** DES will reduce DoD’s cyberattack surface by introducing stronger and more consistent cyber standards. At the same time the program will consolidate Host-based Security Systems (a commercial off-the-shelf suite of applications that protect DoD networks), and weed out foreign/out-of-tolerance equipment.
- **Single Service Provider:** Under the winner-take-all aspect of the DES contract, one contractor will be chosen to meet the requirements of reducing costs of duplicative common-use IT environments, providing best practices and state-of-the-art network capabilities, and enabling 4ENO mission focus by removing non-core competencies.

These three lines of effort come with a variety of challenges, especially in a resource-constrained environment.

“One of the goals of network optimization is to consolidate services and find cost savings for the department and ultimately our nation’s warfighters,” Llewellyn “Don” Means, DISA’s DES executive, told Breaking Defense. “It is also a challenge to bring infrastructure and security in varying states up to DoD standards. However, the main challenge is that every Defense Agency and Field Activity is important, and



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we have to enable all of their missions while finding these efficiencies. Our program is mindful of investment where we can maximize return and accomplish the program objectives of efficiency, security, standardization, and mission success.”

OTHER DOD TRANSFORMATION INITIATIVES OFFER GUIDANCE



*Llewellyn "Don" Means,
DISA Defense Enclave
Services Executive.*

Through DES, the DoD will minimize risks by using a secure cloud, which is an efficient way to reduce the number of networks and duplicative environments. The DES cloud will also optimize IT management tools and enhance cybersecurity. As an example, Perspecta followed this model recently for the Army's Total Ammunition Management System (TAMIS).

All of TAMIS's tactical and training ammunition requests and expenditures for the Army, Marine Corps, National Guard, and reserves were transitioned to AWS GovCloud, Amazon's secure cloud service for DoD and federal agencies. Perspecta built an agile DevOps framework for the AWS GovCloud environment that generated system efficiency for the Army's TAMIS: 80 percent quicker production time, 63 percent improvement in operational efficiency, and 50 percent reduction in IT spend, according to the company. Perhaps most importantly, TAMIS was able to continue executing its missions throughout the migration to the AWS cloud.

Another key component of DES transformation is expected to be the use of managed services, which would be an effective way to deliver the suite of services to 22 disparate agencies. DISA currently uses the Zeus framework for data center services, and it would provide efficient automated functions for asset and lifecycle management, as well as full visibility into multi-cloud infrastructure and operations.

And finally, it's expected that DES will employ software-defined networking (SDN) for maximum flexibility. In use at DISA since 2017, SDN enables network control through software applications rather than the underlying hardware technology, creating a more efficient and agile approach. SDN provides a dynamic, efficient network configuration that improves performance, response and monitoring, allowing changes to be made almost in real time. It permits networks to scale quickly, shortening the time needed to activate network connectivity.

NEXT STEPS FOR DES

DISA plans to award two contracts for DES. The first is a full-and-open single-award indefinite delivery/indefinite quantity contract for all Fourth Estate DAFAs that is scheduled to be awarded the first quarter of FY22. The second contract is for audio visual and video teleconference support services to DISA headquarters, as well as commodity audio visual conference-room support for four Fourth Estate agencies. This second DES contract is a single-award Blanket Purchase Agreement for small business with a Request for Quote scheduled for release second quarter FY21 and award third quarter FY21.

Note from our sponsor:

To learn more about Perspecta's capabilities and how they support the DES requirement for complying with DOD's National Defense Strategy, visit www.perspecta.com/DES